

NEWS SUMMARY

GENERAL

Nuclear talks for USSR and U.S.

Mr. Edmund Muskie, the U.S. Secretary of State, said yesterday that the U.S. and the Soviet Union had reached an understanding on holding preliminary negotiations to limit each other's nuclear forces in Europe.

Air fares cut

British Airways will cut some internal air fares by up to 50 per cent from November 1, to try to encourage winter travel.

Berlin trains back

Freight trains resumed running between West Berlin and West Germany after striking West Berlin employees of East German railways won rights for trade union elections.

Ferry to close

P and O Ferries decided to close its London-Ostend hydrofoil service after seven months in operation. Seajet's Brighton-Dieppe service closed last month.

Westward warned

Westward Television has been warned by the Independent Broadcasting Authority, after recent Boardroom disputes, that its commercial television franchise is in danger.

Jail follows fire

London landlord Savvas Haggi-Pieri, who wanted his tenants to leave, was jailed for two years for manslaughter after a fire started in which three of them died.

Census challenge

Detroit city won a lawsuit challenging the accuracy of this year's U.S. census, which could affect its political representation and the amount of its federal aid.

Korean reform

South Korean President Chun Doo-Hwan plans a new constitution abolishing the present political parties, Government sources said.

Pickets sentenced

Two "flying pickets" were jailed for six months at Shrewsbury Crown Court after causing damage of more than £5,000 to lorries during the steel strike in February.

Afghans sacked

Kabul Mayor Assadullah Payom and Afghanistan's deputy industries Minister, Gulnam Mohammad Rahimi, have lost their posts in a purge of the ruling People's Democratic Party.

Home and away

Local newspapers claimed a world record for the 41 per cent absenteeism recorded at Alfa Romeo's Naples car plant. Officials said staff stayed home to watch football on television.

Briefly...

Alaska abolished state income tax because of booming oil revenue.
Heart transplant patient Ewan MacPhee, 23, died in Papworth Hospital, Cambridge, seven months after his operation.
Led Zeppelin drummer John Bonham, 31, died.

CHIEF PRICE CHANGES YESTERDAY

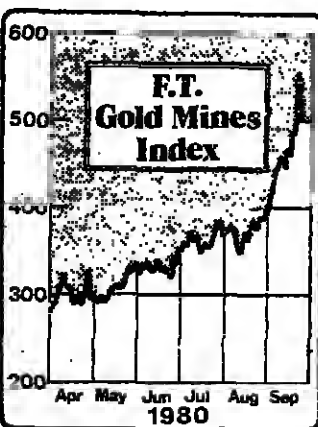
(Prices in pence unless otherwise indicated)

RISERS		FALLS	
Treas. 5p 1983	221 + 1	Brooks Watson	19 - 3
APV	215 + 12	Brown and Jackson	80 - 4
Amalgamated Metal	235 + 9	Derby Trust Cap.	273 - 8
BL	23 + 3	Eurotherm	286 - 8
Beecham	157 + 4	Farwell Elec.	338 - 7
Bureau Dean	21 + 5	GKN	180 - 7
Dunlop	82 + 3	Hoskins and Horton	68 - 10
Haden Carrier	146 + 7	London Brick	72 - 4
House of Fraser	132 + 4	Office & Electronic	313 - 15
MFI	62 + 7	Wilkinson Warburton	47 - 3
Morrison (Wm.)	170 + 7	Barlow Hlids.	96 - 4
Norvic Secs.	9 + 14	East Driefontein	114 - 11
Bank Org.	160 + 14	Gold-Mn. Kaigoorlie	545 - 30
Burnham Oil	189 + 9	Impala Platinum	545 - 10
Clyde Petroleum	580 + 40	Minoreo	640 - 20
KCA	141 + 7	North Kalgurli	107 - 6
Utomat	443 + 16	Poseidon	345 - 12
Mount Carrington	68 + 6	Samantha	85 - 10
		Southval	1173 - 1
		West Driefontein	546 - 21
		Western Deep	530 - 13

BUSINESS

Equities up 1.1; Golds off 17

● EQUITIES steadied despite market nervousness about Iran/Iraq developments, and the FT 30-share index regained 1.1 to 484.4. GOLDs fell on fresh



profit-taking, the Gold Mines index closing 17.0 down at 500.0. Page 32

● GILTS: The Government Securities index rose 0.03 to 70.24. Page 32

● GOLD shed \$13 in London to close at \$395.5. Page 28

● STERLING fell five points to \$2.3990. Its trade-weighted index was 76.1 (76.3). Page 28

● DOLLAR rallied late to close at DM 1.7980 (DM 1.7945) and Sfr 1.6440 (Sfr 1.6430). Its index eased slightly to 83.8 (83.9). Page 28

● WALL STREET was off 0.94 at 963.82 shortly before the close. Page 30

● GOVERNMENT is set to announce the first £400m instalment of a cash injection for the British Steel Corporation, as concern for nationalised industries grows among Ministers. Back Page: Crisis in industry, Page 18

● CEILING of 10 per cent in nationalised industry price rises for the next year was urged by the State-financed National Consumer Council. Page 8

● URGENT study into the future of the Royal Ordnance Factories has been launched: the introduction of private capital into the organisation is being considered. Page 9

● NATIONAL Enterprise Board is expected to be left with a heavy loss on Alfred Herbert, its machine tool subsidiary, which effectively collapsed three months ago. Back Page

● VAUXHALL's Chevette car, made at Ellesmere Port, is to go on sale in West Germany next month. About 5,000 vehicles will be shipped there this year.

● POLISH economy lost a further 21.25bn (\$24.4n) through strikes and stoppages in September, on top of August's 21.36bn, the party newspaper Trybuna Ludu says. Back Page; Pravda attack, Page 2

● BRITAIN is to oppose any radical changes in the structure of the International Monetary Fund and World Bank when members meet in Bermuda next week. Page 3

COMPANIES

● VICKERS, which merged with Rolls-Royce Motors in August, increased first-half pre-tax profits to £12.62m (£6.89m), including £8.17m final interest compensation for its British Aircraft Corporation holding. Rolls-Royce profits for the 24 weeks to June 14 fell to £1.24m (£4.58m). Page 20 and Lex, Back Page

● DUNLOP Holdings announce a fall in first-half taxable profits from £18m to £15m, as finance charges rose to £25m (£21m). Page 20 and Lex, Back Page

Tehran experiences the fear of war as sirens sound a practice alert

A resident in Tehran yesterday said this eyewitness description of the capital mobilising for war:

Tehran tonight experienced the fear of war for the first time in its history. Just before 8 pm the sirens sounded for the first time while an announcer on Tehran radio told listeners: "There is about to be an Iraqi air raid. This is serious, very serious. Citizens should protect themselves as best they can."

The western part of the city exploded with the sound of heavy anti-aircraft fire and the sky was lit up by streams of tracer bullets. People rushed on to their roofs shouting: "God is great." In other parts screaming

could be heard. It was only after the firing died down and the panic subsided that it appeared that what the city had experienced was a test of the air raid warning system against what the government fears may well happen soon if the war against Iraq is prolonged.

As the public begins to take the war seriously, so its mood is changing. Considerable frustration exists at the slow rate with which officials release news of the fighting. Many people are once again listening to the BBC and other foreign radio stations.

The campaign against rumour-mongering has got under way,

with 20 people arrested so far in Tehran. Most of these are taxi drivers and one was arrested by a passenger for "praising the Shah and Bakhtar and for saying that there were food shortages."

The mobilisation of the People's Army—the Mostafazadeh Militia—has begun. One of its leaders said yesterday that "several hundred have already been sent to the front following a meeting of units from each of the mosques in Tehran on Wednesday night." In the holy city of Qom, the famous theological centre, Hosieh Elmeh is organising the despatch of clergy to the front.

In the growing mood of

national unity many old quarrels are being forgotten. The normally stridently Islamic daily paper Etoile yesterday carried on its front page a statement from the Marxist Fedayeen Khala guerrilla group. The statement appealed to all the group's supporters, who number many thousands among the students, to rally to "defend the revolution and independence of the country in the face of attacks from the Iraqi fascist regime."

A large crowd gathered on Wednesday when revolutionary guards tried to pull down a street bookstore of the Fedayeen. "Leave them alone," they should be using that gun

against the Iraqis rather than us," were some of the taunts thrown at the guards who withdrew after some shooting in the air.

The need for the unity of all forces supporting the revolution was the main point made by each member of the joint staff when they spoke to the Pressing chief of staff, said this co-operation was taking place under his command.

He admitted that Iran faced "difficulties in repair and maintenance unlike the Iraqis." However, he thought that if "this war goes on and becomes more widespread, then I believe we will win. The Iraqis may

score some temporary gains but eventually we will be victorious."

On Wednesday night, for the first time since the war of words with Iraq turned into a shooting war, the people of Tehran were forced to face the fact that they were at war. "Turn off your lights, sister. There's a war on," shouted men from the revolutionary committees as they toured the streets at dusk searching out the many recalcitrant homes.

They need not have bothered for within an hour, at 8 pm, the electrical power supply for the whole city was switched off. Cars

Continued on Back Page

U.S. in talks on joint force

BY DAVID BUCHAN IN WASHINGTON AND JAMES BUXTON IN LONDON

THE U.S. is discussing with its major European allies and with friendly Gulf countries the possibility of forming a joint naval force which could move into action should Iran blockade the Strait of Hormuz at the entrance to the Gulf. Such a force would almost certainly not move into action however, unless invited by at least one Arab State.

Preliminary talks have taken place at the UN in New York where many countries' Foreign Ministers are gathered for the General Assembly. The U.S. wants to keep a very low profile following President Carter's pledge of "strict neutrality" in the Iran-Iraq conflict.

U.S. officials said yesterday they hoped that Britain, France and West Germany would all take the diplomatic lead in trying to lift any blockade, although France alone has warships stationed in the Indian Ocean.

Yesterday the Sultanate of Oman said that shipping in the

Strait of Hormuz was flowing normally and had not been interrupted. The shipping lanes through the Strait pass through Omani territorial waters and the Omani Ministry of Foreign Affairs said it had "full authority and control over the passage."

The Omani statement followed earlier reports that shipping was being blocked by the Gulf of Oman outside the Strait. But these were discounted by Lloyd's of London and shipping agents in the Gulf. Iranian warships have been questioning by radio crews of cargo ships coming into the Gulf in an attempt to stop them reaching Iraqi ports. But no harassment has so far been reported.

In Paris, Mr. Toriq Aziz, Iraq's Deputy Prime Minister, gave an undertaking that Iraq would do everything in its power to ensure free passage of international shipping through the Strait.

Speaking after talks with President Giscard d'Estaing, he

stressed that Iraq would fulfil its obligations as an oil supplier to Western countries. But according to French officials he did not ask the French President for more arms, although France is Iraq's second largest arms supplier, after the Soviet Union.

While the Iranian navy is considered by the U.S. to be in no shape to operate a complete blockade of the Strait, it could threaten to sink ships or it could lay mines, which would strongly discourage shipping from using the Strait and send insurance rates soaring.

In such an event, the Carter Administration apparently has no intention of intervening to protect oil tanker routes through the Strait, unless invited to do so by one or more Arab States in the area.

Such an invitation could come from Oman, which though responsible for guarding the Strait, has emphasised in the past that it does not have the

capacity to do so in a dire emergency.

The U.S. has a small naval force based at Bahrain in the Gulf and a larger group of 26 ships led by two aircraft carriers said in Washington to be in the northern reaches of the Arabian Sea off the Oman coast.

The U.S. has put none of the forces which would make up its Rapid Deployment Force on alert because of the war, partly because it is anxious to demonstrate its neutrality and partly because the closure of the Strait of Hormuz would be a naval problem requiring a naval solution. The bulk of the force exists only on paper as yet, and will be built up only over the next five years.

Oman has an agreement with the U.S. allowing American use of certain port and airbase facilities in an emergency. This is part of a network of facilities the U.S. is building up in the region.

Details of the war and other developments, Page 4

Weighell loses committee post

BY OUR LABOUR STAFF

MR. SID WEIGHELL, the general secretary of the National Union of Railwaymen, was voted out of the chairmanship of the TUC's transport industries committee, in re-election, he believes, for his support for Mr. Frank Chapple, general secretary of the Electrical and Plumbing Trades Union.

Mr. Weighell said yesterday: "I was arguing for the right of everybody to express their views without fear or favour. If we abandon that, we might as well pack up as a movement. I don't know where this will end."

Mr. Chapple described the removal of Mr. Weighell as chairman as "a further nauseating piece of behaviour by bloody foolish people. It's a foolhardy act by a bloody-minded bunch of bureaucrats."

The removal of Mr. Weighell, and that of himself from the finance and general purposes committee, resulted from "an organised effort."

He questioned the position of Mr. Tom Jackson, general

secretary of the Union of Communications Workers, who also supported Mr. Chapple of the general council meeting on Wednesday. Mr. Jackson is chairman of the TUC's international committee.

Mr. Jackson said that Mr. Weighell's removal as chairman was "an outrage."

"If this is going to be the way in which they carry on, then they must expect those who do not agree with them to organise. This is no way to run the TUC," he declared.

Mr. Weighell has been replaced as chairman by Mr. Larry Smith, executive officer of the Transport and General Workers Union. Mr. Smith joined the general council of the TUC this year, and was not present at the committee meeting which removed Mr. Weighell yesterday by 12 votes to seven.

It is believed that some five or six TGWU officials on the committee voted against Mr. Weighell, together with Mr.

Ray Buckton, chairman of the train drivers' union ASLEF.

Mr. Chapple warned the TUC of almost certain legal action against it if the election's union were suspended from its membership because of its stand on the Isle of Grain dispute.

Some TUC leaders yesterday sought to divert attention from the political aspects of Mr. Weighell's removal from the chairmanship and to draw attention instead to his controversial views on rationalisation in the transport industry.

Mr. Weighell last month failed, for instance, to gain the support of Mr. Buckton, for the TUC's draft proposals on a productivity claim, to be put to British Rail, in exchange for an efficiency agreement.

At a conference on the Employment Act, yesterday, Mr. Chapple made some harsh comments about the TUC and its leadership.

The "winter of discontent," the economic climate and the lack of leadership had weakened

the movement and "shattered our self-confidence," he said.

The TUC was "split and directionless" and its case against the Employment Act had been damaged by its failure to condemn actions at the Isle of Grain and at Huddersfield during the steel strike.

There was considerable evidence that, in general, the union leadership's public declarations were often not supported by the members.

£ in New York

	Sept. 24	previous
Spot	\$2.4010-30	\$2.4015-4025
1 month	1.15-1.06	1.06-1.01
3 months	2.10-2.05	2.07-2.02
12 months	3.15-3.05	3.15-3.00

Big offshore expansion forecast

BY RAY DAFIER, ENERGY EDITOR

INVESTMENT by the oil and gas industry offshore Britain is expected to be about £60bn during the next 15 years, Mr. John Raisman, chairman and chief executive of Shell UK, said yesterday.

The programme should boost employment prospects — the number of associated jobs could double to 70,000 to 80,000 — and present a major challenge for UK industry, he told a Highlands and Islands Development Board conference at Aviemore.

The resources to remain sufficient beyond the year 2000. But to achieve this the oil industry would have to step up its exploration and development activity.

Future expenditure could be three times the £20bn spent in the North Sea so far. Some £40bn, in 1980 money, would

be needed to develop new fields and to complete work on the existing 25 commercial discoveries. Operational and maintenance costs looked like being over £15bn. To find the necessary oil would require the drilling of about 500 exploration wells, at about £5m each.

Further investment would be required for associated facilities such as chemical plants, gas treatment centres, storage tanks and pipelines.

All this work would require a big increase in the labour force.

Oil companies, platform construction yards and contractors directly under oil industry supervision today employed 35,000 people on North Sea operations. Of these 12,000 were involved in operating and maintenance work. By 1995 the total figure could have doubled to

70,000 to 80,000 jobs. In addition there would be employment opportunities in supportive industries such as hotels, laundries, grocery provisions, house building and sectors involved in the design and manufacturing of equipment such as pumps, generators and instruments needed for oil development and production.

"I am not describing a period of industrial activity which would be short-lived," said Mr. Raisman. "Nor are the opportunities for British industry confined to this country alone."

Expertise, skills and equipment would also be needed overseas where the opportunities for oil-related work could result in contracts worth many times the

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Esso chemical plant plan, Page 6

Energy trends, Page 6

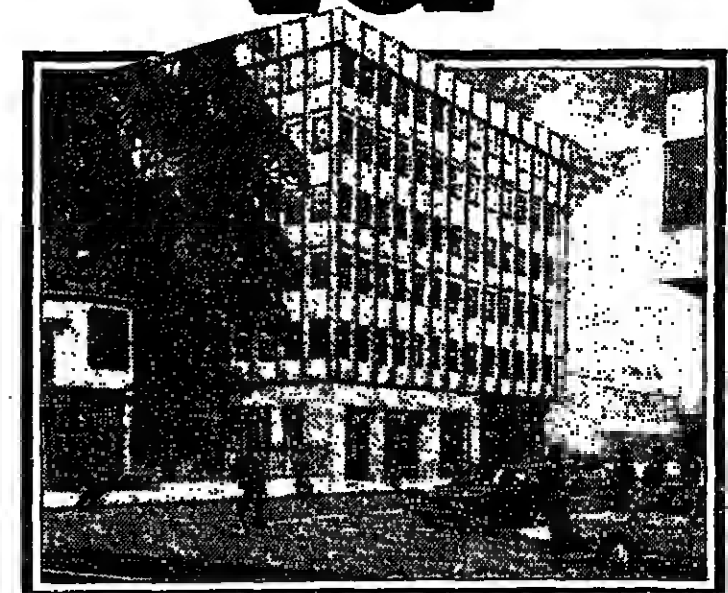
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EUROPEAN NEWS

IG Metall muffles split over wage claim tactics

BY ROGER BOYES IN BONN

IG METALL, West Germany's most powerful trade union, yesterday ended its annual conference, having carefully muffled a serious split over negotiating tactics in the coming winter wage round.

The row within the union in many ways highlights the conflicts building up in the German trade union movement.

In the past fortnight two other influential trade unions—IG Chemie, the chemical workers union, and HBU, the bank and insurance workers union—have seen an almost unbridgeable gulf develop between the union leadership and the grass roots membership.

The nub of the criticism is that the often-aging leadership of these unions has centralised power in its hands, that the leadership consults only rarely with its regional outposts, and that this in turn has led to a conciliatory attitude towards employers.

The IG Metall dispute centres on the "pilot region" negotiating tactic. This means that the union is more or less obliged to follow the first acceptable wage settlement reached between a regional union bargaining committee and the employers. This year, after a certain amount of pressure from the central leadership, one region settled at the surprisingly low figure of a 6.7 per cent wage increase.

As a result, most of the other of the union's regions had to follow suit, although they were eager and able to hold out for a considerably higher wage increase, especially given the low 4.5 per cent settlements over the previous two years.

During the IG Metall conference Herr Fritz Steinkühler, head of the Baden-Württemberg region, sharply criticised the central leadership on this score and pressed for more

independence in wage negotiations.

The attack was parried by the union leaders who were this week re-elected to their positions. But Herr Eugen Loderer, chairman of IG Metall, made it clear that this was going to be his last term of office. This statement has encouraged the regional union chiefs to believe that they will be able to wrest more power in the coming years.

The power struggle is important because it has wide-ranging implications for the future of the German economy. IG Metall's wage settlements have traditionally been followed by every other German union.

This means that as long as the IG Metall leadership is moderate and in tune with Government wishes, wage claims can be kept within manageable limits. More regional autonomy in negotiating could set off a wage explosion, with serious implications for inflation.



Turgut Ozal leaves for Washington today.

Turkey debt meetings 'next week'

By Melvin Muir and David Tonge in Ankara

TURKEY'S new military Government is to go ahead next week with pre-conference talks to ease the terms under which the country was lent \$3bn last year.

Requests for rescheduling of the debt will be put to the banks by Mr. Turgut Ozal, deputy Prime Minister under the new Government and the architect of the economic stabilisation measures introduced by the ousted Government of Mr. Süleyman Demirel. He visits Washington next week for the annual International Monetary Fund and World Bank meetings.

Mr. Ozal's intentions provide further confirmation that Turkey's generals are to continue the economic policies of the Government they overthrew. Before the coup put an end to increasing extremist violence and crippling strikes in Turkey's metal and textile industries, it was feared that Western bankers would strongly resist Turkish requests for rescheduling.

Mr. Ozal, speaking in his first interview since the announcement of the new Cabinet last Sunday, said that Turkey would maintain the austere economic policies at home, launched in January. He warned, however, that it would take up to five years to ensure the complete recovery of the Turkish economy.

Mr. Ozal argued that the economic situation had already improved.

The inflation rate had fallen from an annual rate of over 100 per cent to 2 per cent per month, although seasonal factors could lead to a slight increase in the near future.

Shortages of goods such as cooking oil, fuel oil, cement, iron and steel had been overcome.

The freeing of most interest rates had led to a surge in deposits with the banking system.

Strikes which were crippling the metal working and textile sectors had ended.

John Wyles assesses the row over the European Community budget

An awkward moment in Brussels

THE EUROPEAN Community can increasingly be caught in moments of embarrassing awkwardness. So bad, in fact, was the spectacle presented by the Council of Ministers' budget meeting which finished at 6 am on Wednesday morning, that the European Commission was provoked into unusually outraged complaint.

Behind the Commission's disassociation from the draft budget adopted by the European Community's Finance Ministers lay a somewhat belated sense that the Community must stop saying one thing and doing another. Heads of Government and their Treasury Ministers over the past 18 months have acknowledged the need to reduce agriculture's share of the Community budget, yet the budget ministers undid most of the Commission's attempts to change the spending balance.

The inevitable impression is of a Community which wants to do better, but not yet, and of a Community which can progress only from one crisis to another.

Thus the row over the British budget rebate precipitated a commitment to try to restructure the budget. But this effort may really materialise only when the Community is pushed into a cash crisis by biting its spending habit based on 1 per cent of member states' value-added tax.

It is this prospect of running out of money which produced much of the motive power behind the ministers' decisions. All wish to avert such a catastrophe before the Ten have decided to restructure the budget. This fact that the Commission's budget proposals would have consumed all but £346m of available resources was a cause for concern when no provision was made for next year's farm price increases. In addition, almost every Community government is struggling

with domestic political pressures calling for public spending cuts, and therefore felt bound to question the Commission's judgment that Community payments should rise by 28 per cent next year.

Two governments, however, followed the political logic through to an unequivocal conclusion. President Valéry Giscard d'Estaing, facing the election next April, is determined that French farmers should enjoy as high a farm price increase as he can wring out of the other eight by next March 31. Hence the French requirement that funds be available for farmers, and hence the need to cut the Commission's proposals.

Chancellor Helmut Schmidt of West Germany, meanwhile, obviously wants victory at the polls on October 5, and both the size of his Government's budget deficit and of West German contributions (now much the largest) to the Community budget have featured as campaign issues.

There was also a strong element of Community politics in the Franco-German calculation. The area of the budget which the European Parliament is indisputably free to adjust is non-obligatory spending, largely non-agricultural part of the budget. Here, the procedure is

much more complicated than in any elective democracy. The indicative rate of increase of non-obligatory spending is determined by the so-called "maximum rate," a Commission calculation based on the growth in member states' domestic budgets and the trend of the Community's gross domestic product and overall inflation. The maximum rate for 1981 over 1980 is 12.2 per cent. The Commission's non-obligatory spending proposals were 38 per cent higher. By Wednesday morning, the council had cut the increase back to around 12 per cent, that is, the constitutional maximum rate.

Now the Parliament can, and probably will, exercise its power to restore cuts, without council approval, of up to half the maximum rate—which means that non-obligatory spending inevitably rises to 18.3 per cent. Appropriations beyond that are a matter for agreement between the Council of the Parliament, which could take up to December or beyond to finalise. The Parliament may, as it did last December, reject the entire budget if more than half its members are present and two thirds vote for rejection. The result would be to block a 1981 budget, and force the Community into a spending strait-

jacket based on its 1980 budget.

Now, in the face of a possible confrontation with Parliament, the Franco-German economy drive may collapse. This is for the simple reason that Parliament's amendments, which will almost certainly favour restoring some of the Commission's plans, can be rejected only by a qualified majority of the council.

Italy, because it has a strong interest in regional and social spending, and because it detests the cuts bulldozed through this week, is likely to favour the Parliament's position. It will be supported by some, if not all, the Benelux countries and Denmark.

Glitching the likelihood of adoption of a 1981 budget in some form or other is the UK interest. First, the British Government wants a smooth procedure to ensure that it receives as much as possible of its 577m budget rebate by the end of next March. Thus it will cast its votes in the direction likely to avert a deadlock with the Parliament. Second, the four-core British MEPs are likely to frustrate any attempt to build a two-thirds majority in favour of rejecting a 1981 budget. This week's battle does not make a war.

W. German economic slowdown continues, says IFO survey

BY JONATHAN CARR IN BONN

FURTHER evidence of slowdown in the growth of the West German economy emerges from the latest survey of business opinion published today by the IFO economic institute of Munich.

Even allowing for the fact that the survey covers the summer holiday month of August, when some economic slowdown is normal, the signs of an across-the-board worsening of the business climate are unmistakable.

Manufacturing industry reported a slower intake of orders and fewer orders-in-hand despite production cuts in earlier months, particularly in the mechanical engineering branch.

In the building sector, production was below the average of the previous three months, although orders-in-hand are still sufficient for three months' work, a slight increase on the figure a year earlier.

Hopes in the wholesale trade that were raised by a 4 per cent sales increase (in nominal terms) in July as against a year earlier have not been met. The August sales result was about 7 per cent in real terms below that of August, 1979.

It is a similar tale in the retail sector, with turnover 8 per cent down in real terms at an annual rate.

Despite the fall, it is still likely that the Government's

hope of real economic growth this year of 2.5 per cent will be fulfilled. The economic upturn in the first half was a little stronger than expected, and the downturn in the second a little faster than feared.

The Government view, also broadly shared by IFO, is that there are fair prospects that the economy will be through the trough and starting to grow steadily again in the course of 1981.

The condition is that no major, unforeseen international crisis—for example, a cut in oil supplies—emerges to upset the trend. The current IFO survey was finished well before the Iran-Iraq conflict began.

Ireland to consider gas link to Belfast

By Stewart Dalby in Dublin

THE Irish Government has agreed to enlarge its feasibility study on a gas pipeline from Cork to Dublin to include a Dublin-Belfast link as well.

Ireland has one major gas field off Kinsale Head in Co. Cork. In full production this field could supply 125m cubic feet of gas a day, equivalent to perhaps 15 per cent of Ireland's energy needs by the mid 1980s.

The main company supplying Dublin with "town gas" is alling, and Mr. George Colley, the Deputy Prime Minister and Minister for Energy, has long hinted that Dublin's needs could be met from the Kinsale field.

A large proportion of Northern Ireland's needs could also be met if it were politically possible to have a gas pipeline.

Italy's engineering and metal workers go on strike

BY RUPERT CORNWELL IN ROME

SOME 1.5m engineering, and metal workers went on strike throughout Italy yesterday to protest at the plans of the Fiat car group, Italy's largest private concern, to make 14,469 workers redundant as it cuts back its production over the next 18 months.

Mass rallies took place in Fiat's home city of Turin and in Naples, where Sig. Pio Galli, one of the metalworkers' national leaders, warned that employees would take over Fiat's plants if no solution is found.

At present the main hopes of a compromise rest with Sig. Francesco Cossiga, the Prime Minister, who has seen delegations from both sides in the past 48 hours. But Sig. Cesare Annibaldi, Fiat's personnel director, confirmed yesterday that the gap between them remained as wide as ever.

The next stoppage planned is a four-hour general strike on October 2, but union leaders have warned that this could be enlarged and brought forward should no progress be forthcoming. The distinctly wobbly coalition administration of Christian Democrats, Republicans and Socialists is meanwhile pressing hard for redundancies to be avoided, and the Italian car industry, whose productivity is already woefully low, this week appears to have beaten even its own worst records.

The Alfa Sud subsidiary of the State-owned Alfa Romeo car manufacturer reported that on Wednesday absenteeism at its Pomigliano d'Arco works near Naples reached an unprecedented 41 per cent. This is double normal levels of around 20 per cent, which are already reckoned to be unsurpassed.

East-West tangle in Madrid

BY ROBERT GRAHAM IN MADRID

THE PREPARATORY meeting here for the Third Conference on Security and Co-operation in Europe is becoming increasingly bogged down by fundamental differences of view between East and West. Delegates from 35 states have been meeting in Madrid since September 9, but no substantive progress has been made.

The meeting is discussing the procedure and framework for the main conference which is due to open on November 11. But these procedural matters reflect the differing approaches of East and West Europe, plus the U.S. and Canada, towards the conference. Behind dry diplomatic language and wrangling over even where commas should be placed lie vital points of principle.

Western delegates are determined to draw up an agenda for the November conference that allows proper time to castigate the Soviet Union for its abuse of human rights and the East bloc's failure to live up to the Helsinki Act of 1975—the Act which was an agreement on a set of principles for conduct between European states signed

after the First Security Conference. For its part the Soviet Union and its allies are equally determined to prevent either this happening or to limit the amount of time available to the West in which to do this.

The two sides are therefore locked in a procedural dispute over how much time should be devoted to discussion of implementation of the Helsinki Act. The Western delegates are arguing in favour of a frame-

work similar to that used at the previous meeting in Belgrade, which ended in March 1978. This procedure gave scope to the West for a thorough discussion on the Helsinki Act's implementation.

The Soviet Union is trying to wriggle out of such a framework. But having once accepted the framework, which it did at Belgrade, a precedent was created, which is difficult to ignore.

Moscow tough on Poland

BY DAVID SATTIER IN MOSCOW

THE SOVIET Communist Party newspaper Pravda yesterday quoted Lenin as saying that trade unions in a Socialist country must be under firm Communist Party control, making it clear that the Soviet Union does not accept Poland's independent trade unions as permanent.

The quotation, which came in a review of a collection of articles by Lenin on trade

unions, coincided with reports in Poland of a power struggle between the new independent trade unions and the old official bodies.

The Soviet leaders have so far tolerated the spread of the independent trade union movement in Poland, but it is unlikely that they would have called attention to its ideological unacceptability if they expected the movement to last.

French retail prices show 13.6% rise

By Terry Dochow in Paris

LARGE increases in French public sector prices last month have fed through into another hefty rise in the retail index.

The 1 per cent increase over the July figure means that prices have gone up by 13.6 per cent compared with August last year. On the basis of the last three months' results, they are now rising at 12 per cent annually.

While the August figure was well above the level required if the Government wants to meet its original inflation target of 10 per cent for the year, it marked a significant fall on the 1.5 per cent rise registered in July. This decline is in line with Government aims and repeated statements that the inflation rate would fall in the latter part of the year.

In order to meet these forecasts, the Government can count on more stable prices in the public sector during the rest of the year—it says it will not be authorising more increases—plus fewer rises from the energy sector.

ENERGY REVIEW: NORWAY'S OFFSHORE RESERVES

BY WILLIAM DULLFORCE, NORDIC EDITOR

Gas price is key to future policy

THE PRICING of natural gas is likely to be the critical factor in Norway's petroleum policy during the 1980s. In recent weeks leading Norwegian politicians, including Prime Minister Odvar Nordli and Energy Minister Bjartmar Gjerde, have reiterated the demand that gas prices be brought into parity with oil prices in spite of re-negotiations from the Americans and intervention by the West German authorities to block a deal for the sale of gas from the Statfjord field at a near parity price.

Some time next year the Norwegian Government and Storting (parliament) will have to decide whether to develop the next big oil field, the so-called golden block on 34/10, or to leave it on ice until the 1990s and to concentrate instead on bringing some gas discoveries into production to feed a gas trunk pipeline to the continent. Gas contracts at higher prices would probably swing the balance.

Moreover, it appears that the Norwegian continental shelf contains more gas than oil. In the fields now producing or declared commercial, the ratio of recoverable reserves is roughly 60/40 in favour of oil. If discoveries under evaluation are added, the ratio turns 55/45 in favour of gas.

The estimate allows for reserves of only 400bn cubic metres in the giant structure discovered by Shell on block 31/2. Norwegian experts believe this figure can be multiplied by four to give recoverable reserves eight times as big as those of the Frigg field, which supplies about 30 per cent of Britain's gas.

Even if the Norwegians delay development of 31/2 until the 1990s in order to allow time for the exploration of adjacent blocks and to decide whether the oil in the reservoir can be produced, the Oil Directorate in Stavanger expects the blocks

allocated under the fourth round to provide more gas finds. Norway's reserves, it calculates, are likely to show a 70/30 ratio in favour of gas over oil in a few years.

Pricing is also part of the more immediate question of whether the associated gas in the Statfjord field should be landed in Norway or in Britain. Only about a quarter of the 4bn

cubic metres a year could be used industrially in Norway; the rest would have to be exported in liquefied form.

Now that the British Gas Corporation (BGC) has offered what even Statoil executives describe as a "fair" price for the Statfjord gas, the state oil company will have to negotiate a very favourable price for LNG deliveries to the Continent to make financial sense of the project to build petrochemical plants in Norway based on the Statfjord gas.

Statoil provoked the U.S. Government to protest to Norway in June after it had contracted with Gelsenberg, BP's West German subsidiary, for delivery starting 1984 of 1985 of gas from the small Ula field—a BP discovery—at a price reported to have established parity with oil prices.

The price has not been published, but it is understood to have included a base rate 20 per cent above the average 1979 gas price, with an escalation clause linked to the development of prices for three crude oils from the British and Norwegian North Sea shelves and from the Middle East.

Statoil followed up this copy

by getting a preliminary agreement with BP Gelsenberg for the delivery of Statfjord gas in 1986 at the same price. The West German authorities prevented the completion of that contract, and Gelsenberg was forced to join the North Sea gas negotiating consortium headed by Ruhrgas.

It can be argued that Statoil got its timing wrong. It clinched its gas deals when U.S. buyers were locked in tough negotiations with Algeria over LNG supplies and when the West Germans were talking with the Russians about increased deliveries of gas from Siberia. But the Norwegians do not accept the American suggestion that they were letting down the industrialised countries by taking the lead in forcing up gas prices.

The American argument, which has also been voiced by the International Energy Agency, is that the industrialised countries should use more gas as an energy source in order to reduce their dependence on oil. The incentive to consumers would be that gas offered a cheaper alternative than oil for some uses.

The Norwegians reply that, if Europe is to use more North Sea gas, the cost of developing gas fields must be met, and that means a higher gas price. An enormous investment would be required in a gas-gathering pipeline to bring on stream some of the small and medium-sized fields.

There is a significant nuance in the Norwegian pricing position compared at least with that of the Algerians. The Norwegians are aiming at parity between gas and oil prices at the market, i.e. a c.i.f. price parity. The Algerians have been seeking an f.o.b. price for their LNG. Moreover, while the Algerians have sought to link their gas price with their own light crude oil, Statoil has been

offering linkage with a "basket" of North Sea and Middle East crudes. Both depart from the traditional link between natural gas and heavy fuel oil, but the Norwegians gas would come out cheaper than the Algerian.

In any case, events appear to be moving to the Norwegians' direction, even if the buyers, including the Americans and BGC, have still not accepted their claim for price parity. The Japanese are now importing LNG from Abu Dhabi at c.i.f. parity with the cost of Abu Dhabi crude landed in Japan.

The U.S. is paying more for Mexican and Canadian gas while in Europe Ruhrgas agreed in August to pay a higher, though undisclosed price for Dutch gas. The USSR has been negotiating the sale to West European buyers of some 40bn cubic metres a year of Siberian gas; nothing official has been said about the price quoted, but in Oslo officials believe the Russians are also seeking a parity formula.

The BGC offer for the Statfjord gas also represents a substantial increase on the prices previously paid by the corporation. The price has not been disclosed but, according to Norwegian officials, it is an offer to buy at the wellhead at a price between what BGC now pays for the gas from the Frigg field and the parity with crude sought by Statoil.

The "parity" price aimed at by the Norwegians is under-stood to have been Nkr 1.10 a cubic metre for North Sea gas landed on the continent. This works out at roughly \$4.70 per million BTU or in British terms 25-27 pence a therm, depending on the calorific value. The translations to BTU and therms are not exact, and in the Statfjord case BGC is offering to buy at the wellhead, not for landing in Scotland.

BGC is also understood to have included an escalation

clause under which the base price would rise in line with the development of oil blends of British heavy fuel oil prices and North Sea crude prices between now and 1986, when the first deliveries are due.

The Norwegians may have succeeded in forcing BGC into raising its price, but it is by no means certain that the Statfjord gas will be piped to Scotland through the new British gas-gathering pipeline, even though this would offer the simplest and most economic solution. Political considerations may lead the Norwegian Government and Storting to plump for landing in Norway.

Earlier this year Norsk Hydro submitted a plan for landing the gas on the Norwegian west coast and building near the site of the Mongstad refinery NGL separation and LNG plants together with ammonia, methanol and ethylene plants. Statoil reacted sharply; it has plans to expand capacity at the Mongstad refinery in two stages

The projects would provide between 1,300 and 2,000 new jobs.

from the present 4m tonnes to 10m tonnes a year and realised that two major projects could not be undertaken simultaneously at Mongstad.

It tabled two alternative projects for the industrial use of the Statfjord gas in Norway and set about obtaining sales contracts for the LNG which would be available for export. Statoil's managing director Arve Johnsen indicated that capital investments of some \$3bn would be required.

The present position is that the industry Ministry has asked Norsk Hydro and Statoil to sub-

mit formal applications for two projects, one at Mongstad and the other at Karsto, and to indicate how much they would pay for the gas. It is an open secret that the Norwegian companies cannot match the BGC offer, if their industrial projects are to be run at profit.

On the other hand, the projects would, it is estimated, provide between 1,300 and 2,000 new jobs directly or indirectly in the west coast area and the projects are strongly backed by local politicians. Some time next spring the Government and Storting will have to decide whether it is wise to build up industries, which are not economically viable in their own right, and if so, how much they are willing to pay for the new jobs.

But the Statfjord case is an exceptional one in the total Norwegian gas picture. The most recent discoveries on the Norwegian shelf have put oil and Energy Ministry into a dilemma, because if it allows them to be developed unhindered, the production ceiling of 90m tonnes a year laid down by the Storting will be broken in the next ten years.

The investment volume would probably also be more than the small Norwegian economy could safely cope with. Capital spending has been running at a level of about Nkr 10bn (82bn) a year for the past five years and a further Nkr 30bn in 1979 prices are already decided for the period up to 1984.

Production from the fields on stream will level off at 60-65m tonnes oil and gas a year in this decade. Mr. Johnsen has said that the golden block will be declared commercial this year. Investment could start in 1981, but its output alone would take Norwegian production to the 90m-tonne ceiling.

It is becoming more and more evident that in the not too

RESERVES FROM NORWEGIAN CONTINENTAL SHELF

Fields declared commercial	In place		Recoverable	
	Oil cu metres m	Gas cu metres bn	Oil cu metres m	Gas cu metres bn
Albaskjell	34	40	13	23
Cod	6	9	8	8
Edda	36	9	8	6
Elfrisk	849	191	180	111
Elfrisk	588	141	88	52
Frigg	—	158	(1)	127
Murchison*	19	19	8	(1)
N.E. Frigg	—	19	(1)	14
Odin	—	20	(1)	22
Statfjord*	442	119	34	40
Tor	144	25	27	18
Ula	70	8	29	3
Vallhall A	216	54	43	28
West-Ekofisk	54	31	14	28
	2,498	838	781	477
Fields under evaluation				
Balder	77	(1)	16	—
Bream	(1)	(1)	(1)	—
Brinfing	(1)	(1)	(1)	—
Flyndre*	(1)	(1)	(1)	—
S.E. Frigg	—	6	—	1
Heimdal	4	2	2	5
Hod	57	15	12	34
Murphy	—	2	—	9
Sleipner	40	210	14	145
S.E. Tor	21	6	4	3
Vallhall	149	40	32	54
1/9-Alfa	26	19	5	11
1/9-Gamma	18	18	4	13
15/2-1	24	84	6	43
25/2-4	23	25	4	22
30/6	—	32	—	12
30/7-6	—	32	—	28
31/2	—	570	—	375
33/9-Alfa	37	4	18	—
33/9-Beta	78	4	39	—
34/10-Alfa	17	6	8	—
34/10-Delta	233	15	714	—
	817	1,140	281	796
Total	3,515	1,978	1,061	1,269

N.B.—NGL included in oil figures. (1) = less than 1 cu. metre. 6.3 barrels. * Norwegian interests: Frigg 60.82%, Edda 30.20%, Murchison 16.25%, Statfjord 84.09%. † The Vallhall except Vallhall A.

Source: Oil Directorate

distant future Norway will have to choose between oil and gas. Then the price offered for the gas could be decisive.

AMERICAN NEWS

Reagan shatters moratorium on political comment

Carter accused over Gulf war

BY JUREK MARTIN, U.S. EDITOR IN WASHINGTON

THE BRIEF moratorium on political comment here on the Iraq-Iran conflict has been shattered by Mr. Ronald Reagan's charges that President Carter's policies have been responsible for the outbreak of hostilities in the Gulf.

Campaigning in Texas and the Far West, the Republican candidate alleged specifically that if the Carter Administration had not "pulled the rug" from under the Government of the deposed Shah, Iran and Iraq would not be at war.

More generally, he said that the U.S. was forced to adopt a policy of strict neutrality because it did not possess the military capability to do otherwise.

Bearing in mind that the President has recently accused him of being a threat to world peace and has cited several past instances where he has appeared to have advocated the use of American troops overseas, Mr. Reagan was careful to add that "I am not looking to use force anywhere unless it is absolutely necessary to our national

security." He did not say whether events in the Gulf met that condition.

The White House was quick to respond, with Mr. Jody Powell, the Presidential Press Secretary, saying it was "absurd" for Mr. Reagan to suggest that Mr. Carter's policies could have caused a war between Iran and Iraq.

Indeed, later in his campaigning day, Mr. Reagan toned down the language of his assault in a more general statement, on which he refused to elaborate, noting the threat to both the safety of the U.S. hostages and to world oil supplies, but still saying that "a vacillating foreign policy and a weakened defence capability are largely to blame."

Mr. Reagan also took dead aim at what he described as the "feeble" attempts of the Administration to secure the release of the hostages in Iran. He repeated what he had said earlier in this election year but had ignored later—that the U.S. should have made clear that "no nation could continue



Ronald Reagan... hitting out.

to have friendly relations with Iran and have friendly relations with the United States."

For much of his western

swing, Mr. Reagan had been trying to focus on the local issues that serve him so well in the region, such as the use of resources and the distaste for Federal bureaucracy, as well as his standard drumbeat of criticism of Mr. Carter's economic record.

But, as has been apparent throughout the last month, the campaign has been effectively dominated by a series of transcontinental wars of words, with Mr. Reagan seemingly forever being pushed to answer the latest in the President's verbal foibles.

In so directly accusing the President of quasi-culpability in a foreign war, the Republican nominee is trying to take the initiative in this game for once. But he has also in the process broken new and, for him, possibly dangerous new ground.

It is a political rule of thumb that to attack a sitting President at a time of palpable international crisis tends to be counter-productive.

Senator Edward Kennedy found this out ten months ago when he implied that the President had been too close to the Shah and that the Iranian demands for restitution had merit. Public reaction to that suggestion hurt Mr. Kennedy a lot.

It is a certainty that the Carter campaign which showed its sharpness in turning Mr. Kennedy's charges against him, will do the same with Mr. Reagan—thus exacerbating the bitterness that has already been such a feature in this race for the Presidency.

That there is national discontent with Mr. Carter's record in foreign policy is not in dispute, but to exploit it is not necessarily politically easy. This is doubly so when it is Mr. Reagan who is seeking to do the exploiting because doubts about Mr. Carter's performance are matched by reservations about Mr. Reagan's abilities in international affairs.

Hollywood actors' strike to end soon

By Paul Setts in New York

THE TWO-MONTH-OLD actors' strike which has brought virtually all filming activity in Hollywood to a stop and cost the industry about \$40m (£16.5m) a week, is expected to end shortly.

This follows a tentative agreement reached between the actors' union and the producers in Hollywood yesterday. The actors are expected to rally this during the next few days.

The contract includes a 15 per cent increase in minimum salaries for the first 18 months and 15 per cent over the second 18 months for a compounded increase of 32.25 per cent over the life of the contract, Mr. Phil Myers, representing producers, said in Hollywood yesterday.

Agreement has also been reached on the more crucial issue of compensations to actors from new cable television and video cassette productions whereby actors will get a share of about 5 per cent of the royalties.

This issue was at the core of the strike as actors have been campaigning for a cut in the profits of the new electronic software which is changing the face of the home entertainment business in the U.S.

Until the two sides reached a compromise, the surprisingly effective strike had caused enormous disruptions to the U.S. film business and problems for the major national television networks, which had to postpone their new autumn seasons as series and films had not been completed.

Meanwhile, a strike by musicians at the Metropolitan Opera House in New York risks compromising the company's forthcoming season.

Britain opposes changes in IMF and World Bank

BY PETER RIDDELL IN HAMILTON, BERMUDA

THE BRITISH Government opposes radical changes in the structure and character of the International Monetary Fund and the World Bank.

Faced with demands from the less developed countries for a greater say in the running of these two bodies, the British attitude is that it is a delusion to believe that the richer developed nations will provide more support if the character of the institutions is changed.

This view emerged here yesterday as Sir Geoffrey Howe, the British Chancellor, and senior Treasury officials prepared for next week's Fund and Bank meetings. They are due to fly later today to Washington following the end last night of the two-day meeting here of Commonwealth Finance Ministers.

The British view is that the poorer countries must understand the reality of the financial position, and hence balance of voting power, of the U.S., the UK and West Germany in the Fund and Bank.

Changes in global financial balance have already been reflected in the admission of Saudi Arabia to the policy-making Interim Committee of Finance Ministers. This move is, however, seen as very different



Sir Geoffrey Howe... standing firm.

from turning the Fund into an aid organisation.

There is a general recognition that the voting structure will have to be re-examined but that this should happen in the eighth review of Fund quotas which is unlikely to start until the U.S. Congress approves the seventh quota review.

In general, Britain favours the development of existing international institutions rather than the creation of new ones. It hopes that any new energy agency should, for example, be an affiliate of the World Bank rather than a separate organisation. The UK does, however, say there is no shortage of private sector capital available in the search for oil.

The British Government still hopes that the work of the Fund and Bank meetings will not be disrupted by the question of whether the Palestine Liberation Organisation should be admitted as an observer to the meetings. The issue has not been formally discussed here.

Britain has not been slow to defend its own contribution in face of some criticism from other Commonwealth leaders in view of the current and proposed cuts in the level of spending on overseas aid. British participants have pointed out that the aid budget is worth £950m which is the fifth largest in volume terms among aid givers.

This represents 0.52 per cent of Gross National Product compared with the United Nations target of 0.7 per cent.

Republican criticises Chile

BY MARY HELEN SPOONER IN SANTIAGO

MR. RONALD REAGAN'S chief adviser on Latin America, Mr. Roger Fontaine, who is on a five-day visit to Chile, said that a Reagan Administration would support human rights in the continent, but in a "more consistent" fashion than the Government of President Jimmy Carter.

However, Mr. Reagan would provide more assistance to those Latin American régimes "friendly" to the U.S.

In instances of human rights abuses under such régimes, he said, the U.S. should "make

private expressions of concern." Mr. Fontaine criticised what he called the "public pillory" approach, saying that such a stance could be easily labelled interventionism and did not help human rights.

"It is a question of what works best," he said. "The off-and-on approach loses credibility and effectiveness."

Mr. Fontaine, a former university professor now at the conservative American Enterprise Institute, repeated reservations expressed earlier about Gen. Augusto Pinochet's

régime in Chile. He said it seemed that Gen. Pinochet was attempting to remain in power indefinitely.

"There have been favourable developments in Brazil and Argentina," he said. "I wish I could say the same about Chile."

A Reagan Administration would seek to strengthen its bilateral relations with the major powers in the region, and would revise the U.S. relationship with Cuba in a more critical light, said Mr. Fontaine.

Detroit wins challenge to census

BY OUR U.S. EDITOR IN WASHINGTON

THE CITY of Detroit has won an important court victory that could affect both the political representation and the amount of federal aid enjoyed by major U.S. centres.

A Federal judge in Detroit upheld the city's suit challenging the accuracy of this year's national census. He ordered the Census Bureau to adjust its provisional count of the population of Detroit to allow for the fact that it had under-estimated the number of non-white residents.

Preliminary statistics released by the Census Bureau last month suggested that Detroit's population had fallen from about 1.5m in 1970, the last national census, to only 1.15m. The bureau acknowledges that its count normally underestimates the number of non-whites, many of whom fail to respond to questionnaires because of their transient status.

Several other major cities with substantial minority populations have filed actions along the same lines. Detroit's suit was

supported by a brief from the U.S. Conference of Mayors. Under U.S. law the 10-yearly national census which this year cost \$1bn (£416.3m) to conduct, is the basis for determining each State's Congressional representation.

Even before the judge's ruling in the Detroit case, it was by no means clear that the 1981 re-appointment which otherwise would have reflected the population shift in 1970s to the "sun-belt" States, was going to proceed on schedule.

IBM chief in row over holdings

By Our New York Staff

MR. FRANK CARY, chairman of International Business Machines and a man who normally shuns the political limelight, has thrust himself to the centre stage of a row about how much outsiders who serve on government agencies should be obliged to disclose about their personal finances.

Mr. Cary has withdrawn his nomination for membership of the board of the government's planned U.S. Synthetic Fuels Corporation, arguing that the disclosure rules amounted to an "unnecessary invasion of privacy."

Mr. Cary said he had no objection to a public listing of the companies in which he holds a financial interest or in declaring the dollar value of those interests both to the White House and the relevant Congressional committees. But he did object to open public revelation of the value of his holdings, stating that such disclosure would not have assisted the legitimate purpose of insuring against potential clashes of interest. As a result of Mr. Cary's objections, the White House withdrew his name from nomination on the seven-man board.

Go-ahead for Bill to ease curbs on rail prices

BY IAN HARGREAVES IN NEW YORK

THE CARTER Administration's long-delayed efforts to lift pricing regulations on U.S. railways cleared their last hurdle when House and Senate committees agreed on a final version of the Railway Deregulation Bill.

The final bill adopts most of the features of the more liberal variant, allowing the railways widespread freedom to price significantly in excess of general inflation without interference from any government agency.

The bill also provides funds for a number of ailing railways including the government-

controlled Consolidated Rail Corporation (Conrail). Other features of the legislation are increased operational flexibility for railways, easier rules about mergers and more freedom to confer with groups of customers about rates.

One larger merger in the eastern half of the U.S., between Chessie system and Seaboard Coast Lines, was approved earlier this week, creating the largest U.S. railway company with combined sales of more than \$4bn (£1.6bn) last year and 37,000 miles of track. Other merger proposals are in the pipeline.

American court told of gun-running to IRA

RALEIGH, NORTH CAROLINA—A former gun dealer told a court here that he was not aware that weapons purchased in his shop were destined for Northern Ireland until Federal agents began a gun-smuggling probe in 1976.

The dealer, Mr. Binford Benton, a former partner in the B and B gun shop in Wilson, North Carolina, is the prosecution's chief witness at a trial in which three Americans are

charged with conspiracy to supply the Irish Republican Army (IRA) with guns and ammunition.

The U.S. Government contends that from 1972 until early this year Mr. Howard Brutoo of Wilson and two New York men, Mr. George Demeo and Mr. Robert Ferrero, conspired to supply the IRA with up to 100 guns and 1m rounds of ammunition. Reuter.

Miller fears interest rate blow

BY IAN HARGREAVES IN NEW YORK

MR. WILLIAM MILLER, the U.S. Treasury Secretary, yesterday said he had a "real fear" that the rising trend in U.S. interest rates may abort the recovery in the U.S. economy before it has got fully underway.

At the same time, Mr. Miller stood by the Federal Reserve Board in its strategy of attempting to hold monetary growth within its annual ranges—a strategy which has contributed to tightness in the credit markets and higher rates.

Mr. Miller said the country should expect such a strategy to continue and attempted to shift the blame for rising rates upon to Mr. Carter's political opponents and the many elements in Congress which favour a tax cut before the end of the year.

Tax cutting talk, monetary

expansion and tensions in the Middle East had made the money markets nervous. "Interest rates will reflect that," he said.

Less than a fortnight ago Mr. Miller was talking of interest rates having peaked, but with the Prime Rate now at 12.5 per cent and set to go higher, he is clearly having second thoughts.

In a speech to the U.S. Conference Board in New York, Mr. Miller appealed for a longer view to be taken about the need to rid the U.S. of an inflation rate which remained "dangerously high."

He appealed to business to make the 1980s "a decade of unparalleled growth in investment" in order to reverse declining productivity and capital formation trends in the U.S. economy. Earlier at the conference, Mr.

Albert Somers, Chief Economist of the Conference Board, a leading organisation of U.S. businessmen, said that the U.S. had not experienced a recession this year but "a violent monetary trauma" caused by high interest rates.

He also attacked suggestions of stimulating consumption by tax cuts, but said that the conventional monetary practices of the Fed, accompanied by wild swings in interest rates, raised serious questions.

He even suggested that the Fed's reluctant but dramatically effective use of credit controls last spring—which triggered the sharp drop in second quarter GNP—were now being "appraised with surprise and a kind of grudging admiration: perhaps even with the Federal Reserve itself."

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THE IRAQ/IRAN CONFLICT

Richard Johns, Middle East Editor, reports from Baghdad on a grandstand view of an Iranian air attack on the Iraqi capital

Iranian Phantoms add showmanship to their bombing run

THE HOTEL Mansour Milia is 12 storeys high and Iranian Phantom jets use it to line up their bombing runs on Baghdad targets.

Shortly before 7 am yesterday reporters were shaken from their beds by the sound of anti-aircraft fire. Three Iranian fighter-bombers had penetrated Iraqi airspace and were closing in on the city.

The three jets zeroed in on the hotel, a prominent landmark on the banks of the Tigris River. This correspondent saw one Phantom peel to the right, seemingly 100 yards

from his window, and swing across the river over the Imam al-Adam mosque and the tomb of Imam Abu Hanifa. The two sites are important shrines of the Shia sect.

The jet then dropped its bombs on military points near the capital's old civilian airport. Another Phantom veered off in the opposite direction and struck at the small Dora oil refinery but failed to blow it up.

Big plumes of smoke rose from the Rashid military camp nearby. Correspondents visiting the oil installation reported that it was undamaged.

The raid was among the first low-level raids made by the Iranians. Iranian jets reported to have been shot down during Tuesday's opening raid on the city were flying at a higher altitude.

The flying was impressive and bnt that possibly an element of publicity might have been in the pilots' minds.

Iraq now awaits the next military communique and Baghdad remains glued to radio and television sets for the next piece of news from the fighting.

At a press conference on Wednesday night General

Adnan Khairallah said that official Iraqi communiqués issued about Iranian losses were only those that could be confirmed with certainty.

Baghdad sinks nearly totally into darkness during the evening blackouts. Cars still dash recklessly through the streets flashing their lights only to avoid a pedestrian or an oncoming car.

The full moon might have been expected to help the Iranian bombing runs on the capital but the nights have been cloudy. Surprisingly the Iranians do not seem to have attempted

to take advantage of the moonlight anyway.

Early morning traffic, however, seems to have returned to normal. The formidable teenage girls in blue denim suits who direct traffic are back at their corner posts shepherding the traffic jams across the bridges which span the Tigris.

Despite the closure of the Shatt-al-Arab waterway, Iraq's only outlet to the sea and the scene of fierce fighting for three days, there appear to be no shortages in the city.

General Khairallah told a Press conference that Iraq fully

realised the danger of starting a major conflict in the Gulf. He added that he hoped Iran would agree to Iraq's demands for recognition of disputed territory as Iraq.

It is certain that there have been civilian casualties in the city but full figures are not available.

The raid yesterday morning appeared to be in retaliation for the previous night's raid by the Iraqis on Kharg Island, the Iranian tanker terminal in the Gulf.

Later a statement by the high command said 13 enemy air-

craft were shot down in attacks on the Dora refinery and the northern Iraqi cities of Mosul, Erbil and Kirkuk.

The Iraqis, for their part, have promised to answer the Iranian's "tit for tat" when they attack oil installations or civilian areas. Iraq now claims to have captured 115 square miles of Iranian border territory.

Meanwhile from Kuwait come reports that hundreds of foreign refugees from southern Iraq flew home yesterday. An unknown number of people were still waiting at the

Abdali crossing point on the Iraq-Kuwait border for permission to cross, diplomats said.

A Polish embassy official said two flights were leaving to take home between 400 to 500 Poles. They were mainly employed at the Zubair petrochemical complex in Iraq.

The British embassy said most of the 300 Britons who had arrived in Kuwait had flown to Britain or to countries lower down the Gulf.

The last British group to arrive at the frontier, six people including children, was due to leave by air later.

Oil production 'goes on despite war'

BY SIMON HENDERSON IN SAHRAH

IRAN'S oil production is continuing despite the war with Iraq, the country's Oil Minister, Mr. Javad Tondguyam, claimed yesterday.

In his first interview on taking office, he said that although Iran's main refinery at Abadan had been shut, along with the main crude oil terminal at Kharg Island, production was continuing at about 500,000 barrels a day (b/d) so as to meet the capacity of the country's other refineries.

This level is less than the estimated domestic demand of 700,000 b/d and does not account for reports that Iraq is near to controlling the Naft-Shahr oil field which exclusively supplies the refinery at Kermanshah. Until the war, oil production was estimated at about 1.7m b/d of which 1m b/d was exported.

Mr. Tondguyam's remarks, made in a telephone interview with Bahrain, were laced with propaganda. Asked about damage to oil installations, he said the residential areas of the Abadan refinery had been severely attacked along with the hospital and schools. The hospital's operating theatre had been destroyed but an emergency hospital had been set up. The oilfields and installations under attack included the residential area of Ahwaz, the city in the centre of the oilfields of Khuzestan province.

The new oil minister who is 30, replaces Mr. Ali Akbar Vaezi. He said oil exports would be resumed as soon as the emergency was over. He was not able to cost the damage

caused to installations so far. The former Oil Minister has now taken a seat in the Iranian Parliament, where he is to head the parliamentary oil committee.

Further details of the state of Iran's oil industry and economy were given by Mr. Ali Reza Nowhari, governor of the Central Bank, in another telephone interview. He said there had been small queues for petrol but this was because of particular demand from taxi drivers.

He disclosed that some oil was still being exported. An arrangement for credit on a shipment had passed through the central bank yesterday, indicating that a ship had just been loaded. Mr. Nowhari was not prepared to say where this had taken place. Although Kharg Island is closed, the situation regarding Iran's offshore oilfields which formerly produced 400,000 b/d is not known, and the export could have been from them.

The overall picture from a series of conversations with people in Tehran indicated that life in the capital was comparatively calm. One man did say, however, that with the blackout and less cars on the road, the capital was a dead city after 7 pm.

A Moslem ambassador described the mood as one of a nation ready to fight on. Since the bombing attacks on the airport earlier in the week, there had been no visible sign of the war in the capital although there were more police and revolutionary guards on patrol.

Prices continue to firm

BY MARTIN DICKSON

PRICES on the crude oil and products markets continued to firm yesterday in response to the war, with oil rising by some \$10-\$15 a tonne on the day, but the high level of world oil stocks meant that trading remained thin.

On the products market, gas oil barges-loads in north-west Europe were quoted at \$314 to \$320 a tonne, compared to

\$300-\$305 on Wednesday and around \$280 last Friday. Other products also firmed. Heavy fuel oil was quoted at up to \$180 a tonne, jet fuel up to \$340 and premium-grade petrol at up to \$350 a tonne.

Although concern about the continued fighting, large oil companies remained sanguine about the short-term supply prospects.

Baghdad foreign reserves third in OPEC table

BY OUR FOREIGN STAFF

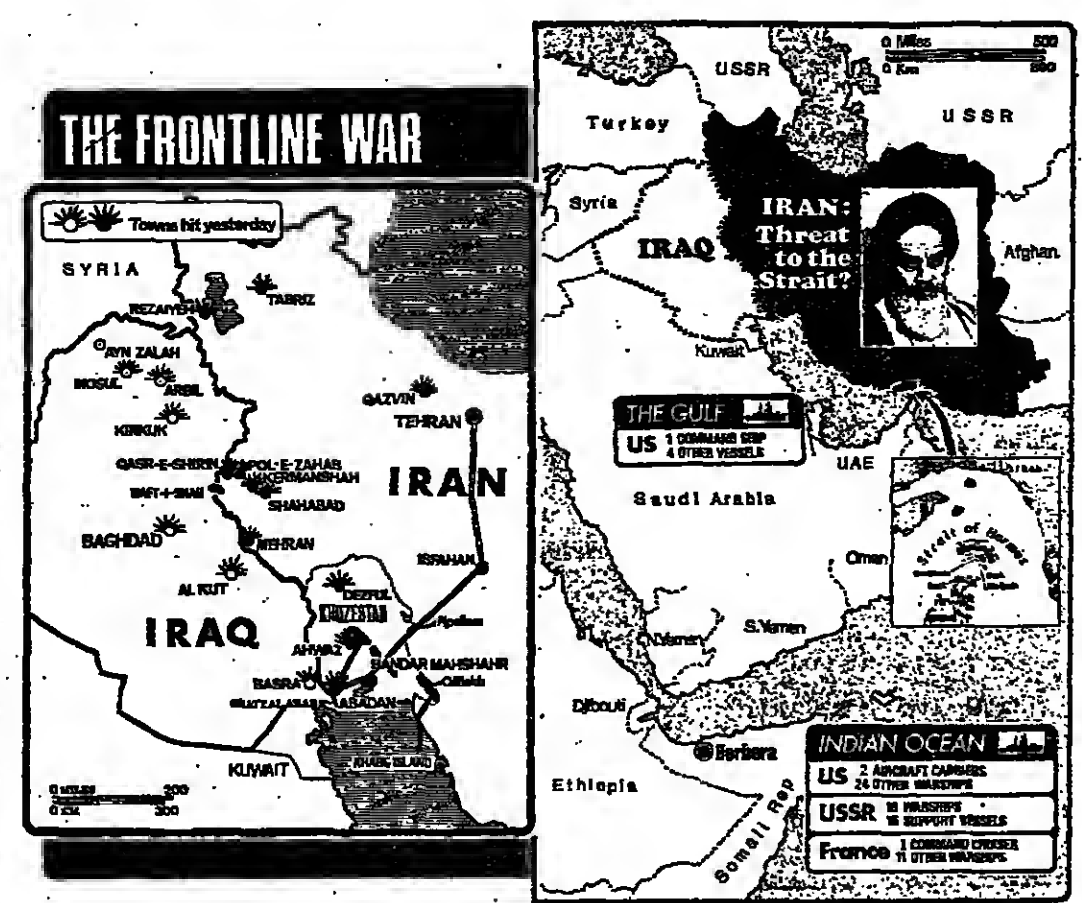
IRAQ IS believed to have the third largest accumulated financial reserves of any of the countries belonging to the Organisation of Petroleum Exporting Countries, but information about their precise size and where they are deployed is scanty.

Estimates put Iraqi reserves at between \$18bn (£7.5bn) to \$26bn at the end of last year. Before the current war and the resulting uncertainty it was estimated that Iraq would have accumulated approximately \$40bn by the end of this year. That would put it behind only Saudi Arabia, expected to have

total accumulated assets of between \$100bn and \$120bn at the end of the year, and Kuwait.

Iraqi funds are thought to be deployed in Paris, London, Frankfurt and other European centres and it is believed that some of its reserves are held in the U.S.

Iraq is believed to want its reserves in a basket of currencies reflecting its needs in paying for imports. But Iraq is paid for its oil in dollars and there are more financial instruments for holding funds in the dollar and sterling than in other currencies.



Hormuz Strait may be ace up Iran's sleeve

BY JAMES BUXTON

THE STRAIT of Hormuz at the entrance to the Gulf has been recognised since the fall of the Shah of Iran early last year as the most vulnerable point in the Gulf region on which the Western countries depend for about half their oil supplies.

The Soviet invasion of Afghanistan has led to the U.S. making elaborate military preparations to move ships and troops into the Gulf area at speed, should it need to do so.

Yesterday, shipping was moving normally and without interruption through the Strait, under the control and authority of the Sultanate of Oman, through whose territorial waters the navigation channel in the Strait runs.

In view of President Carter's pledge of strict neutrality in the Iraq-Iran conflict, the U.S. Government is most reluctant to become involved in military moves to end any blockade that Iran might impose on the Strait—perhaps as a means of heightening the crisis with a

view to persuading other powers to press Iraq for moderation. But only France of the Western powers has a naval force in the Indian Ocean. It comprises 12 ships led by a command cruiser. At present, Britain has no warships in the Indian Ocean, though a force passed through some time ago on its way to the Far East.

Oman has a small naval station on Ghat Island off the Masandam peninsula on the southern side of the Strait, from which it co-ordinates the operations of its patrol boats and helicopters guarding the Strait.

But it emphasised after the fall of the Shah that its navy does not have the capacity to defend the Strait in the more dire form of emergency that it could now face. In particular, its largely British-officered Navy has no minesweepers in the event of a hostile power laying mines.

The United Arab Emirates, Saudi Arabia and Qatar have small and relatively inexperienced

coastal navies. The U.S. is apparently discussing the possibility of these forces becoming involved in a force to lift any blockade of the Strait.

The U.S. itself has a five-ship force based on Bahrain in the Gulf, of which three ships are at present in the Gulf. More distant is a very powerful force of a further 26 ships, led by two aircraft carriers with some 120 aircraft on board. These are officially said to be in "the northern reaches of the Arabian Sea off the Omani coast".

Near the British-owned Indian Ocean island of Diego Garcia, the U.S. has seven chartered frigates and tankers with armour and provisions for a 12,000 man Marine brigade.

This is the spearhead of what will eventually become a rapid deployment force of 200,000 men which can be projected into the area through a total of 15 airfields and ports in Oman, Kenya, Egypt, Djibouti and Diego Garcia.

The U.S. concluded an agree-

ment with the Sultanate of Oman in June under which it will be allowed increased access to Oman's naval and air force bases—at Muscat, Masirah, Salalah, in the southern Province of Dhofar, and Thamarit, an airbase inland from Salalah.

But these facilities are designed primarily to be used in the case of the U.S. needing to bring its own forces into the area to meet a supposed threat from the Soviet Union. The U.S. also has an agreement to use the naval and air force facilities at Mombasa in Kenya.

The U.S. is already using three Egyptian bases at Cairo, West Gena, and Ras Banas, which is an airfield on the Red Sea near the Egyptian border with Sudan. This is to be built up at the cost of \$400m into a much more sophisticated facility than at present.

The most controversial of the U.S. agreement was signed in late August with Somalia and gives the U.S. access to the naval

facilities at Berbera and Mogadishu in Somalia. Berbera was developed by the Soviet Union and also has a long 15,000-ft airstrip capable of taking the largest U.S. transport aircraft as well as B-52 bombers.

The U.S. reckons it could get some combat troops to the area within 48 hours, while the 82nd Airborne Division would take between 10 days and fortnight to reach the area.

The deployment of the full 200,000 men, plus 100,000 reservists, will only be possible when new supply ships and 130 new C-17 transport aircraft have been built—in up to five years' time.

The Rapid Deployment Force should be created by drawing U.S. troops away from other parts of the world, and not by increasing the total strength of the army. It amounts to a huge effort to compensate for the fact that the U.S. is about 7,000 miles from the West's major source of imported oil.

Japanese withdrawal

Plans have been made to evacuate 770 Japanese workers employed at the Bandar Khomeini petrochemical complex in Iran, which was attacked by Iraqi aircraft on Wednesday, Richard Hanson reports.

According to Mitsui, leader of the Japanese companies involved in the joint venture, three bombs struck the complex but only one caused any damage. A storage tank was hit and the debris damaged pipes nearby. The project is 85 per cent complete.

Saudis on alert

Saudi Arabia and other Gulf countries have put their armed forces on alert as a self-defence precaution, in case the war escalates, Government officials said in Bahrain. AP reports. The Saudis had moved an unspecified number of anti-aircraft missile units to their eastern province, which contains Dammam, the world's biggest oil field, and the Gulf oil terminal of Ras Tanura, the officials added.

Bakhtiar denial

Dr. Shahpour Bakhtiar, Iran's last Prime Minister before the Khomeini regime took power, has not formed a Government-in-exile and has no immediate plans to do so, a member of Dr. Bakhtiar's staff said yesterday. Newspapers report that Iranian officials have an overthrowing Ayatollah Khomeini expected Iraq to recognise Dr. Bakhtiar as leader of a provisional Iranian Government "were incorrect," Dr. Bakhtiar was "still in Paris."

Battle to secure stakes in a difficult market

BY PATRICK COCKBURN

IRAQ has always been a difficult country for exporters. Its State-controlled industries have usually been guided in their purchasing requirements by the political alliances of the ruling elite.

But with Iraq the second highest oil exporter in the world, with revenues scheduled before the war broke out to be \$35bn (£14bn) in 1980, the industrialised countries have fought hard to secure a share in the market.

Japan has been the most vigorous competitor in Iraq

since the 1973-74 oil price increase. Following the October war, Mr. Kakuei Tanaka, the then Japanese Prime Minister, visited Baghdad and credits for industrial plant were agreed in return for the Japanese purchase of 90m tonnes of Iraqi crude oil.

In subsequent years, Japan has held its position as the biggest exporter to Iraq, together with West Germany. In the first quarter of this year, Japanese exports were running at a monthly rate of a little under \$200m compared with oil

purchases worth \$390m. West Germany was hit by a trade embargo imposed in 1978 but is still a premier exporter of machinery. It benefits from the exclusion of the U.S. from Iraq.

The U.S. does sell some sophisticated oil equipment, and Boeing has supplied Iraq's national airline with its aircraft, but even this contract is in doubt because of a ban by Washington on the sale of aircraft which could be put to military use. France has made the highest

bid for the Iraqi market. Since the early 1970s, it has persistently cultivated the Iraqi leadership.

This led to guaranteed sales of 30m tonnes of crude to France in 1980, orders for Mirage F1 fighters from Dassault and a number of contracts for French companies notably the contract for the new Baghdad International airport being built by Fougerolle.

The UK has won few construction contracts but is a steady supplier of equipment.

The Iraqis have always been eager to have a broad range of suppliers to call on.

Brazil, for instance, gets half its oil imports, some 500,000 barrels a day, from Iraq, and in return has won a number of lucrative contracts.

Yugoslavia is heavily engaged in dam construction. Iraq has proved a more attractive market than Iran over the past 18 months. The exporters to Iran who will now suffer are the suppliers of foodstuffs, notably France, Australia and New Zealand

OTHER OVERSEAS NEWS

Israeli MPs meet Arafat

BY DAVID LENNON IN TEL AVIV

A MEETING between Mr. Yasser Arafat, chairman of the Palestine Liberation Organisation, and two members of the Israeli Knesset (Parliament) in Sofia, Bulgaria, has caused uproar in Israel.

This is the first time any Israeli politicians have publicly met the head of the PLO and the fact that the Knesset members who attended the meeting belong to the Communist Party has done little to lessen the impact of the event.

Many politicians yesterday broke the traditional peace of the Succot national holiday to demand that Mr. Tewfik Toubi and Mr. Charlie Biton, of the Democratic Front Party, be brought to trial for contact with the enemy.

In the past, Israeli left-wing politicians have met PLO officials but none has met Mr. Arafat who is regarded in Israel as the country's most implacable enemy. Both the ruling Likud and the opposition Labour Parties have always

rejected any negotiations with the PLO.

Mr. Toubi, an Israeli Arab, is a long-time member of the Communist Party. Mr. Biton's Black Panther movement outraged the country in the early 1970s when members rioted to demand better housing and greater opportunities for the country's Oriental immigrants.

The two met Mr. Arafat while they and two other Israeli Communist leaders were attending a meeting in Sofia on Wednesday. The meeting was also attended by two West Bank mayors deported by Israel earlier this year, and also by Mr. Bassam Shaka, Mayor of Nabulus.

Mr. Yoram Aridor, a deputy Minister in the Begin Government, yesterday demanded that the four Israelis be tried for treason. Mr. Shimon Peres, the Labour Party leader, also condemned the meeting.

But some other centre and leftist politicians either dismissed the meeting as unimportant

because the participants are Communists, or welcomed it as a sign that it would be possible to negotiate with the PLO.

AP reports from Cairo: Gen. Ahmed Badawy, Egypt's Defence Minister, has inaugurated a military factory that will produce heavy arms, according to the al-Ahram newspaper. The factory is among the 20 biggest of its kind, the newspaper added.

The \$87m project will start producing heavy artillery guns, including 203 mm weapons, before the end of this year, The report went on.

The factory, called "Project 100" has Western-made production equipment along with certain "technological" apparatus bought from East Germany and Czechoslovakia. Mr. Shawkid Bably, the project manager, said.

Egyptian military factories have so far produced light weapons, some of which are sold to several Arab and African countries.

2 die, 75 hurt in Japan quake

By Our Tokyo Staff

TWO PEOPLE died and more than 75 were injured by an earthquake which struck Tokyo and its surroundings early yesterday. The earthquake, measuring 6.4 on the Richter scale, was the strongest in the area for 24 years.

It was followed by four smaller disturbances. Objects were shaken from shelves in houses throughout the Tokyo area but no buildings collapsed. The damage was much less than that caused by an earthquake which hit north-east Japan in June 1978.

The epicentre was 25-40 miles below the ground in Chiba prefecture, south-east of the capital. The damage would have been much greater if the epicentre had been closer to the surface.

Japan's Prime Minister, Mr. Zenko Suzuki, said yesterday that Japan would keep its military forces at "minimum necessary" levels and was determined not to become a military power.

Delhi welcomes U.S. nuclear vote

BY K. K. SHARMA IN NEW DELHI

THE INDIAN Government yesterday welcomed the U.S. Senate's vote authorising two shipments totalling 38 tons of low enriched uranium for the U.S.-built 400 MW nuclear power station at Tarapur near Bombay.

The shipments have been held up for more than two years while talks were held over India's refusal to submit to full-scale safeguards on the Tarapur plant as required by U.S. law.

A senior official said yesterday that India hoped the U.S. would now air-freight the fuel for Tarapur without delay. But it was clear that the last has not been heard of the contentious issue which has soured Indo-U.S. relations for five years.

The official disclosed that India had earlier this month applied for another shipment of 18.5 tons of low enriched uranium for Tarapur under the 1963 agreement which, India says, makes the U.S. contract

fuel for Tarapur until 1983. Since the two shipments now to be made had to be authorised by President Carter after over-riding the recommendation of the U.S. Nuclear Regulatory Commission and after encountering great difficulty with Congress it can be assumed that the next shipment will face similar hurdles.

The Government is believed to hold that if the U.S. refuses to honour the 1963 agreement on nuclear fuel shipments for Tarapur, India will also be free to disregard its provisions. That would mean that the used fuel now stocked in India because of the U.S. inability to reprocess it would be reprocessed and used in the plant. India has already established reprocessing facilities.

India is already in a position to make its own nuclear fuel but has so far avoided doing so in the hope that the U.S. would continue to honour the 1963 agreement. The Government has already decided that future nuclear plants will not be made dependent on supplies from other countries. Tarapur has been operating at half capacity because of the delay in shipments from the U.S.

President Carter used his powers to authorise the shipments because he believed this was in the interests of improving Indo-U.S. relations. But it is known that the Administration is under heavy pressure to decline further requests for nuclear fuel because of India's refusal to sign the nuclear non-proliferation treaty or to submit to full-scale safeguards on its nuclear power stations.

The Indian view in full-scale safeguards remains unchanged; that unless every country, including the U.S. and Russia

S. Korea seeks new investors

SEOUL—South Korea yesterday announced moves to attract more foreign capital, under which overseas companies can set up wholly-owned ventures there.

The Korean Government has lowered the minimum level of permissible foreign investment to \$100,000 (\$41,600) from \$1m. Deputy Prime Minister Shin Byung-Hyun said. Previously, the Government only allowed foreign companies to go into joint ventures with local business, and the maximum foreign equity was 50 per cent.

The number of ventures 100 per cent-owned by foreign interests would be restricted by Government guidelines, Mr. Shin, who is also a Minister of the Economic Planning Board, said.

The new measures, effective immediately, were aimed at liberalising South Korea's economy, opening it to overseas investment, and strengthening better protection. But the

WORLD TRADE NEWS

Kloekner denies it has abandoned EEC steel cartel

BY ROGER BOYES IN BONN

KLOECKNER-WERKE, the West German steel concern, yesterday strongly denied allegations that it has left the European steel cartel. But at the same time it called for wide-ranging reforms in the cartel, including a common sales agency for European steel and financial incentives for those companies reducing capacity.

The Kloekner-Werke denial, articulated in an interview by Dr. Herbert Glenow, its chairman, comes shortly before Viscount Eddison Davignon, the EEC industry commissioner, meets Tuesday with the heads of 12 European steel producers. Kloekner-Werke will not be taking part in the meeting, but some of its major rivals—and critics—will, including Hoechst, Thyssen and Krupp. Kloekner is clearly anxious to make its views known before the meeting.

Kloekner has been accused by other German producers, notably Hoechst, of breaking ranks by not keeping to production ceilings and underbidding on minimum prices. This has raised the prospect of a price war on the German and other European steel markets—a possibility which appears to have alarmed the Bonn Government, bankers and the more financially vulnerable steel concerns.

Dr. Glenow, however, stressed yesterday that Kloekner had not left the cartel and would follow the Commission's recommendation to cut crude steel output in the second half of 1980. The Commission had called for a 10 per cent reduction in European crude steel production in the second half and now supports a 13 per cent reduction to adjust to falling demand.

But Dr. Glenow made clear that he would not be prepared to enter a new anti-crisis cartel agreement unless the revised production and price levels were applied equally to all members. Kloekner's complaint with the current cartel has been that the production ceiling was fixed at each company's 1974 level—a level favourable to all of its German competitors but not to Kloekner, which had at that stage not brought its new Bremen plant on stream.

This has meant that Kloekner is bound by artificially low output levels, and its new Bremen plant is having to work at only a fraction of its full capacity. Dr. Glenow said this was costing the company some DM 100m a year.

The new Eurofer cartel should, in Kloekner's view, set up a common, privately-financed fund which would reward cutbacks in capacity and stimulate job creation in other parts of the industry.

Plans to construct Peking trade centre in jeopardy

BY TONY WALKER IN PEKING

PLANS TO build a trade centre for foreign businessmen in Peking appear to have fallen through. Construction of the \$250m (£105m) centre was to have started this year.

The trade centre has been in the planning stage for several years. China has provided more than \$1m on designs.

It was expected the trade building would help overcome the chronic shortage of office space in Peking for foreign businesses. Most foreign com-

panies based in Peking work are located in hotels.

The Chinese were reportedly disappointed at the lukewarm response they received earlier this year when they asked foreign businessmen if they were interested in booking space five years in advance at a cost of \$500,000.

The trade centre was planned to have offices for more than 250 companies, and would have included an hotel, an exhibition hall and conference centre.

UK company wins £7m U.S. military contract

By Hazel Duffy, Industrial Correspondent

FAIRLEY ALLDAY MARINE of the UK, part of Fairley Holdings, has won a \$16.9m (£7m) order to supply the U.S. Army with 102 combat support boats. The order follows one from the British Army for 58 CSBs placed last May.

The British design was chosen by the U.S. Army on the basis of its compatibility with the Floating Ribbon Bridge, deployed in Europe, which has been developed by MERADCOM (Mobility Equipment Research and Development Command) in the U.S. At the same time, the contract with a British company is a further example of the opening up of the U.S. defence market to non-American companies.

The development of the multi-role CSBs for NATO purposes was done by a Fairley technical team in conjunction with the Military Vehicles and Engineering Establishment at Christchurch, Hampshire. The vessel can be used for military bridging operations, transporting of personnel and cargo, diving support work, harbour construction support and towing. It will be mainly used by the U.S. Army in Europe.

These two orders will increase substantially the workload at Fairley Allday Marine. Employment at the Gosport and Hamble yards, both in Hampshire, will increase by about 120 in the next year. Major components for the vessels, to be supplied from the UK, will include Sabre diesel engines and Dowty Hydraulics water jets.

Mr. Ian Sutherland, managing director of Fairley's marine division, said yesterday that he expected the U.S. order will stimulate interest from other defence forces. The Fairley group was sold by the National Enterprise Board earlier this year to the S. Pearson group. It includes Fairley Engineering of Stockport, which makes the floating medium girder bridge widely used by armies throughout the world.

Finnish rig exporters show the way

BY LANCE KEYWORTH IN HELSINKI

RAUMA-REPOLA of Finland has contracted to deliver to Global Marine of California by the end of 1982 a semi-submersible oil drilling rig of Friede and Goldman type L-907. The contract is valued at FM 360m (£41.6m), of which the Finnish input is 80 per cent.

This is the second rig of the same type sold to the U.S. company this year. It will be capable of working in sea conditions north of the 62nd parallel, but will not be specially fitted out for Arctic conditions.

Rauma Repola, one of the biggest private industrial companies in Finland, makes a significant contribution to the country's export performance. Its turnover in 1979 was FM 2.7bn.

In 1969, on land reclaimed from marshland in Mantsynoto, on the west coast of Finland, it decided to build a plant for the manufacture of heavy steel structures.

"The North Sea oil boom began in 1970," says Mr. Vaino Lassila, assistant managing director of the company's engineering division, "and we decided to use the new capacity for building oil drilling rigs."

Kaunin's Mantsynoto works is said to be the only yard in the world specialising in the building of oil and gas drilling rigs and ships. The yard is located near the Rautaruuki steel works which produces high-

grade steel. "These facts and our relatively low labour costs plus quick delivery times make us highly competitive," said Mr. Lassila.

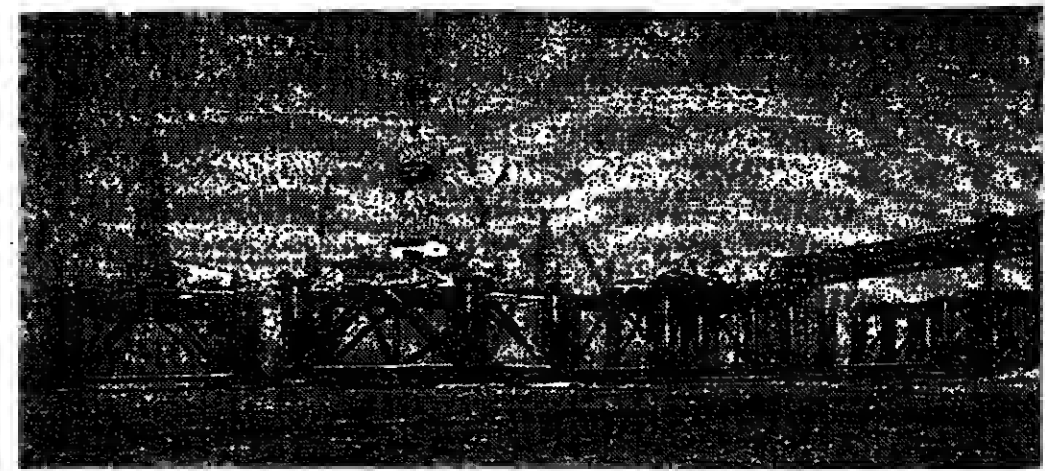
To date, the company has delivered 11 rigs of semi-submersible type, more than any other company in the world. Its order books are full for more than two years ahead.

Rauma-Repola aroused a storm of protest from competing UK shipbuilders and the Confederation of Shipbuilding and Engineering Unions which said that the Finnish tender "contained an element of unfair trading."

Rauma's bid was \$42m while the British bids were more than \$70m. However, Mr. Reginald Eyre, Parliamentary Under

The yard will soon be delivering to the Norwegian company K/S Dyvi Drilling, a rig of Ocean Ranger type which it claims is the biggest rig ever built.

The Mantsynoto order books also include three oil drilling ships for the Soviet Union, for use in Arctic conditions. These



Four drilling rigs being built at Rauma-Repola's Mantsynoto works.

Orders include a multi-purpose support vessel for the Shell-Esso consortium in the UK (to be delivered to Seaforth Maritime next August) for use in the North Sea.

The award of this contract to

Secretary of State in the Department of Trade, put the record straight this year in Helsinki when he told a meeting of the Finnish-British Trading Association that Rauma's bid was fair.

ships will be positioned by satellite and computer control and kept on site by five propellers. Thus, like the craft to be delivered to Seaforth Maritime, they will require no anchors.

Zimbabwe Lome talks end cordial deadlock

BY JOHN WYLES IN BRUSSELS

NEGOTIATIONS on Zimbabwe's application to join the Lomé Convention ended in a cordial deadlock here with the European Commission committed to seeking a more compromising approach from France on future Zimbabwean sugar exports to the EEC.

It has been clear that sugar would be the main problem in

the negotiations since last week when France blocked an offer that would have guaranteed Zimbabwe a sugar quota of 25,000 tonnes a year.

Some 14 other African, Caribbean and Pacific (ACP) signatories of Lomé enjoy a total guaranteed quota amounting to 1.3m tonnes a year. Proclaiming its defence of Com-

munity preference, France, to a storm of criticism, alone opposed any concession which would risk bringing more sugar than the ACP quota into the Community.

Predictably, Zimbabwe has refused to accept a lesser status than enjoyed by other ACP sugar exporters. But, after three days of negotiations, it

indicated that it might compromise on an EEC commitment to a timetable for reaching the 25,000-tonne "target quota" which is being offered.

The Commission will now put such a commitment from the Nine, arguing that other sugar exporters are unlikely to take up the entire quota of 1.3m tonnes.

The Italian contract is based on the same principles as those signed with France and Rubras, though the price differs.

Mr. Gija van Aardenne, the Dutch Economics Minister and Mr. Spierenburg are to report to the Parliamentary Committee for Economic Affairs next Thursday on the progress of the renegotiations.

Oslo fears U.S.-China ship pact

BY WILLIAM HALL, SHIPPING CORRESPONDENT

NORWEGIAN shipowners are deeply concerned about the protectionist implications of the recent maritime agreement between the U.S. and China. The Norwegian Shipowners Association yesterday expressed particular fear that the cargo-sharing provisions of the agreement would adversely affect their trade. Their concern will be raised at the October 5-6 meeting in Paris of the Maritime Transport Committee of the Organisation for Economic Co-operation and Development (OECD).

The U.S.-Chinese maritime agreement was signed on September 17 and includes provisions for increased access to Chinese and U.S. ports and an agreement on cargo sharing.

The agreement is modelled along the lines of an earlier maritime pact between Russia and the U.S., and stipulates that the fleets of both countries will

have access to a "substantial and equal share" of commerce moving between the two countries. In practice this means that both countries have the right to insist that at least one-third of the trade is carried in their own ships.

The U.S. has frequently said that it is opposed to cargo sharing and bilateral agreements of this nature. At the recent Committee on Shipping meeting of the UN Conference on Trade and Development (UNCTAD), the U.S. delegation firmly opposed all moves by developing countries to introduce cargo sharing.

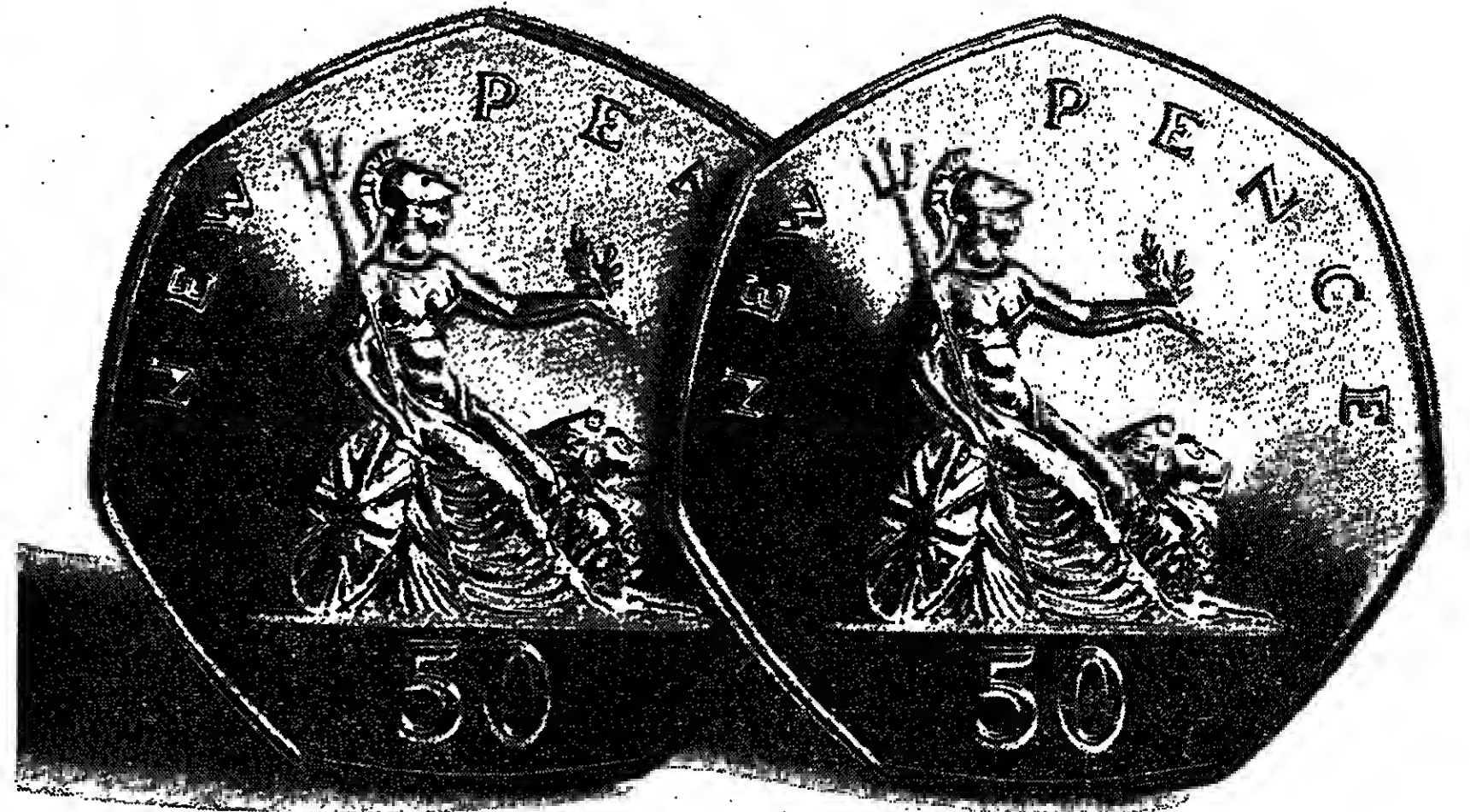
However, the U.S. Administration has let it be known that it sees a place for such bilateral agreements when the U.S. merchant fleet is threatened.

The Norwegian merchant fleet relies heavily on the "cross-trades" and has the most

to lose by the extension of cargo sharing. Although neither the U.S. or Russia insist that the bulk of their trade travels in their own ships, the fear is that at some future date they could change their minds.

Norwegian shipowners argue that there is an important principle at stake and are hoping that the inter-Governmental Consultative Shipping Group will support their criticism of the agreement.

● Maschinenfabrik Augsburg Nuernberg (M.A.N.), the West German engineering concern, has signed a deal with China permitting construction of diesel engines in Shanghai, writes Elgin Schroeder from Bonn. The agreement with the China Corporation of Shipbuilding Industry (CCSI) came into force last week. M.A.N. said this week. No figure was announced for the value of the deal.



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UK NEWS

Ferry for Sealink lacks one engine

By Alan Watson, in Belfast

THE LAST of four ferries built by Harland and Wolff in Belfast for Sealink was launched yesterday without one of its two engines.

The £17m St. David, which will carry 1,000 passengers and 300 cars, has been delayed by three months already. The shipyard is now awaiting delivery of the second engine which was damaged during tests at the manufacturer, APE-Crossley of Manchester.

All four ships for Sealink were subject to delay. The first is now operating on the Larne-Stranraer service. Two others are being fitted out before their handover for use on the English Channel routes.

Sealink confirmed that the purchase of the St. David and one of its sister ships, the St. Christopher, was financed by Barclay Merchant Industrial Finance. The first ferry completed, the Galloway Princess, was purchased through Midland Montagu Leasing. The purchase of the remaining vessel, the St. Andrew, was financed by Lloyds Leasing.

Harland and Wolff is being forced to delay some work on two liquid petroleum gas carriers worth £70m, ordered by a consortium for charter to Shell.

The shipyard said Shell was awaiting approval from U.S. authorities for a new system of insulation for the gas containment tanks.

The ships will be used on routes from the North Sea to the U.S. The original specification for the insulation was rejected by the U.S. Coastguard.

Emergency calls

LONDON FIREMEN answered 53,466 emergency calls in the first half of this year, fire fatalities numbered 70 adults, including one fireman, and seven children, and firemen rescued 168 people from fires. Calls attended comprised 25,400 fires, 10,792 special services, 8,107 false alarms (suspected fires) and 9,167 malicious false alarms.

Government support sought for information technology

BY DAVID FISHLOCK, SCIENCE EDITOR

THE Department of Industry should be the sponsoring Ministry for the whole field of information technology, the Government's scientific advisers have concluded.

In a report published today the Advisory Council for Applied Research and Development urges the Government to make one Minister and one department responsible for its policies and actions on the promotion and development of information technology.

The same department should be responsible for the regulation of communications and broadcasting, it believes.

The council urges the Government to do more to stress the importance of information technology to the future industrial and commercial success of Britain.

It calls for Government publicity and "imaginative promotion" for existing UK successes in the technology, as well as publicity for all public sector plans for the application of UK innovation.

The council wants the Government to give British Telecom the communications side of the Post Office—a mandate to provide "a world-competitive UK

communications network" and enough funds to achieve this goal.

As the council's working group sees the problem, information technology "will perhaps be the most important area of application of micro-electronics. It will eventually affect virtually every household and occupation. It will change patterns of employment and, if the opportunities to supply new goods and services are taken, has the potential to create many jobs."

Britain's trading performance will depend greatly on its ability to compete in world markets for products and services based on information technology.

The council warns that some trading rivals such as France, Japan and the U.S. have already recognised the importance of information technology and established national programmes to stimulate development.

The report gives some broad examples of what it means by information technology. One is the field of telecommunications, including satellite communications. Another is the telephone, where computer-controlled switching systems, such as System X, are bringing many new services.

Other examples are video discs, which will provide visual entertainment and education for "about twice the price of a present full-price long playing gramophone record," and word processors, which can correct and edit typing.

The council estimates world sales for the products and services associated with information technology at \$500m a year, growing at 10 per cent a year in real terms. But it is also impressed by the radically new technological opportunities opening through the convergence of two major technologies, computing and communications.

The council's recommendations to the Government include more attention to information technology by schools and career services, more training in the subject by companies and better links between supplier and user interests to help to anticipate future needs.

It calls for Government recognition of the importance of a UK role in creating international standards and of the need for data protection.

Information Technology. HMSO, £3.30.

Lombard, Page 16

London suburban buses may all switch to flat-rate fares

BY LYNTON McLAIN, TRANSPORT CORRESPONDENT

LONDON TRANSPORT'S entire suburban bus network may switch to flat-rate fare operations if a recommendation about to be put to the LT Executive is accepted.

The plan, to apply to all London Transport buses outside central and inner London, was suggested yesterday by Dr. David Quarby, the managing director of LT's bus services.

Because of the success of the experiments on flat-rate fares in Harrow and Havering, he said he would recommend the plan to the Executive. A flat-rate fare of 20p for all local journeys has been applied on buses in these areas since earlier this year.

LT had expected the 20p fare to cut its revenue. But passenger mileage operated by the buses has increased since the scheme started. Delays and

running times for one-man operated buses have improved.

However, London Transport has no plans to introduce flat-rate fares in central London. Flat-rate fares for long and short journeys would have to be set at levels that might discourage passengers from using the buses for short journeys.

One-man buses will not be introduced on the busy central London and radial routes, at least in the next five years.

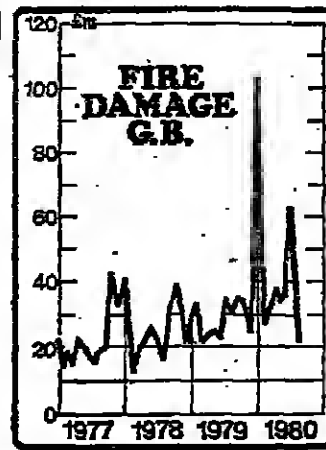
Dr. Quarby told delegates at the Association of Metropolitan Authorities transport conference in London that no system to replace the conductors for fare collection had been found that would speed boarding times without cutting revenue.

The conductors are used

mainly on the Routemaster rear platform buses used by LT since the early 1960s. These buses can pick up a passenger once every second. This compares with the average pick-up time of between three seconds and five seconds for one-man operated buses.

Dr. Quarby also cast doubt on the future of London Transport's plans for its own bus to replace the Routemaster in the mid-1990s. The XRM project for a double-deck bus "with potential for one-man operation in central London" would probably now be abandoned, he said.

Instead, LT would concentrate on "further development of the excellent Leyland Titan and Metro-Cammell-Weymann Metrobus."



Fire damage costs could top £500m

By Eric Short

FIRE DAMAGE costs in the first eight months of this year reached £354.7m—only marginally short of damage costs for the whole of last year which totalled £355.3m. If the trend continues then fire costs for 1980 could exceed £500m.

Last year's damage costs would have been easily exceeded had not costs in August, at £21m, been the lowest monthly loss for more than two years, according to the British Insurance Association.

Even so, damage costs this year are running at more than 50 per cent above last year's level for the corresponding period.

There were three big fires in August where damage in each case exceeded £1m. The biggest was at a cigarette manufacturer in Manchester and cost £1.6m.

The network of fire liaison panels, comprising insurers, fire brigades and industry, in an effort to fight fire losses, will be running a National Fire Safety Week from October 27 to November 1.

OFT proposes changes in consumer rules

CHANGES in the arbitration system for disputes between consumers and traders were suggested yesterday by the Office of Fair Trading.

The proposed changes follow an extensive review of the present system of redress available to consumers under codes of practice sponsored by the OFT.

One of the main changes suggested is that the OFT, in consultation with the Chartered Institute of Arbitrators, should prepare a standard system of arbitration to be offered in codes of practice. This standard system, however, would be sufficiently flexible to take account of specific trade differences.

The OFT is publishing a consultative document listing its proposed changes.

Limit of 10% urged for increases in nationalised industry prices

BY DAVID CHURCHILL, CONSUMER AFFAIRS CORRESPONDENT

A 10 PER CENT ceiling on nationalised industry price rises was urged yesterday by the State-financed National Consumer Council.

Mr. Michael Shanks, the council's chairman, said consumers were tired of the constant price rises for goods and services provided by the nationalised industries.

He pointed out that in the past six years nationalised industry prices have risen more than the general rate of inflation. "And in the past year some of the price increases have been staggering."

Such large increases between August 1979 and August 1980, said Mr. Shanks, included a 30 per cent rise in electricity charges, 28 per cent for post and telephones, and 27 per cent for coal and coke. The overall level of nationalised industry price rises in this period was 26.3 per cent, compared with a 16.3 per cent increase in the retail price index.

Mr. Shanks said a 10 per cent ceiling on nationalised industry price rises should be imposed for the next 12 months. If any nationalised industry attempted

to increase prices more than 10 per cent, the Government should use its new powers under the Competition Act to investigate the reasons for the increase.

Clause 13 of the Act enables the Government to ask the Monopolies Commission to investigate any price rise "of major public concern."

Mr. Shanks also made clear that the Government was as much to blame for the price rises as nationalised industries. He criticised the Government for pushing up gas prices faster than commercial considerations demanded and attacked Government policies on State industry borrowing limits.

"These policies pushed prices higher than they need otherwise have gone and mean that today's consumers are bearing the major share of the cost of capital investment to benefit tomorrow's customers."

His comments came on the publication of the council's annual report, in which he suggests a 10 per cent limit on nationalised industry price rises would help the Government and

private industry to keep wage claims to single figures.

Mr. Shanks rejected the idea that a curb on price rises would automatically reduce the standard of services to the consumer.

"We think there is plenty of room for the nationalised industries to improve efficiency and lower their costs. We think a ceiling on price rises would provide the incentive they need to do just that."

In his report Mr. Shanks also makes a veiled rebuttal to the criticisms voiced by Mrs. Sally Oppenheim, Minister for Consumer Affairs, at the council's congress earlier this year. At that time Mrs. Oppenheim said the council was becoming too political by involving itself in discussions on Government economic policy.

Mr. Shanks said: "The consumer interest is not restricted to a particular set of policies which carry a 'consumer' label. The consumer interest 'permeates the whole field of policies which directly affect people'."

Annual report of the NCC, free, 18 Queen Anne's Gate, London, SW1.

Kagan plea to change trial date fails

BY RAYMOND HUGHES, LAW COURTS CORRESPONDENT

LORD KAGAN complained at the Old Bailey yesterday that he would be gravely prejudiced in his forthcoming trial on theft charges if that trial did not precede one in which his wife and others are to face charges of conspiracy to defraud.

The conspiracy case is due to start at Leeds Crown Court on October 27, to be followed—probably in January—by Lord Kagan's trial.

Applying unsuccessfully to have the trials reversed, Mr. John Matthew, QC, for Lord Kagan told Mr. Justice Smith that the evidence in the conspiracy trial would contain "a vitriolic attack" on Lord Kagan, and allegations that he would not be there to answer.

The inevitable blaze of publicity would make it impossible for Lord Kagan subsequently to get a fair trial on charges of stealing indigo dye from Kagan Textiles and falsifying accounts, said Mr. Matthew.

The application was opposed by the prosecution, and by Kagan Textiles and other defendants in the conspiracy trial.

Mr. Christopher Holland, QC, had always been that Lord Kagan had been involved in the alleged conspiracy. He had not been charged only because he

had gone abroad and had been extraditable only on theft; and not the conspiracy charges.

Mr. George Carman, QC, for Kagan Textiles, said that if Lord Kagan suffered any prejudice it would have been "self-created" by his failure to return to this country voluntarily.

Kagan Textiles would itself suffer commercial, human and legal prejudice if Lord Kagan's case were tried first.

The judge was told that Lady Kagan and his son, Mr. Michael Kagan, who is a co-defendant, adopted a neutral attitude to Lord Kagan's application.

Mr. Justice Smith, who is to try both cases, refused the application.

In the conspiracy trial the defendants are Lady Kagan, Kagan Textiles, Celloform (Yorkshire), Mr. Raymond Kennedy, Mr. Waldemar Ginsburg and Mrs. Dolya Ginsburg. They are charged with conspiracy to defraud on the basis of alleged contraventions of the Exchange Control Regulations in connection with the export of denim cloth, and with falsification of accounts.

Mr. Kennedy is also a defendant in Lord Kagan's trial.

Outlook in chemicals still bleak

By Ray Daffer

THE CHEMICALS industry can expect to see some check in its falling output towards the end of the year, according to a new Government forecast.

But chemical companies are warned that the severity of the economic recession is such that it will be some time before demand returns to even 1979 levels.

A report in the Government Journal, British Business, published today, says the output of the UK chemicals industry fell 9 per cent in the second quarter of this year. The position was likely to remain bleak for the rest of the year with a year-on-year fall in output of 5 per cent.

All sectors of the industry had been badly hit, but basic petrochemicals—the building blocks of various chemical products—had been particularly affected by the recession. Plant capacity utilisation had dropped "dramatically."

"Although the index of chemical production had now fallen below 1975 levels, the cost of materials and fuel purchased by the industry in the first half of this year was 30 per cent higher than in the same period of 1979."

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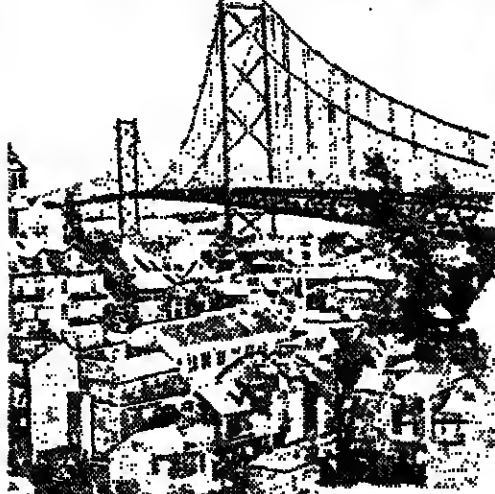
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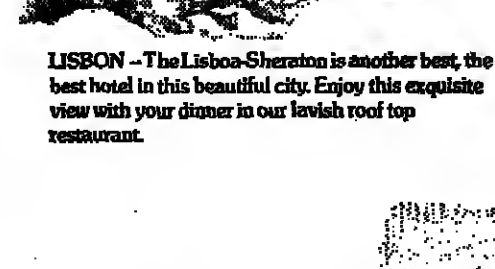
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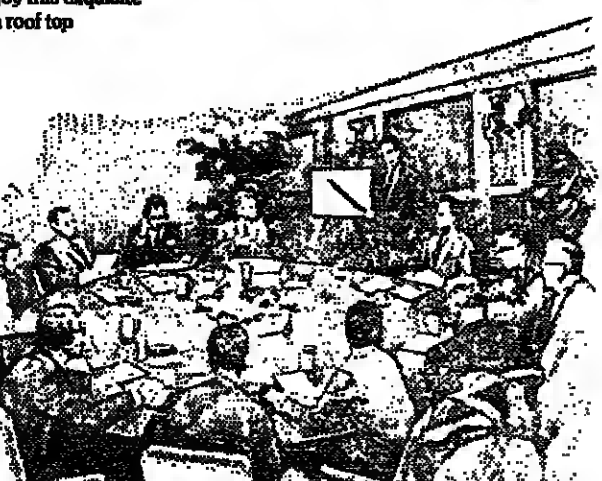
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UK NEWS

Shell opens wage round with 12% offer to drivers

BY NICK GARNETT, LABOUR STAFF

SHELL HAS opened this year's wage negotiations for tanker drivers and depot personnel employed by oil companies with an offer of 12 per cent on basic rates.

The offer follows one of 10 per cent made to refinery workers at BP Grangemouth and 11 per cent to workers at the company's Kent terminal. Both of these offers, however, provide the prospect of renegotiations in six months time.

The Shell offer covers 2,500 workers, of whom 1,500 are drivers, at 46 terminals, 11 airports and two lubricant plants.

Although negotiators for the Transport and General Workers' Union told the com-

pany that the offer—lifting the drivers' basic pay of £92 to £103—was unacceptable, the meeting was said by both sides to be very amicable.

The company will be replying next month to observations made by the unions which is seeking rises above the retail price index.

When the wage claim was drawn up Mr. Jack Ashwell, the union's national commercial transport secretary, said that the tanker drivers were looking for increases that would help to restore basic pay differentials eroded by the size of settlements in the private road haulage industry.

The discussions this year have to some extent been

affected by a separate productivity deal at Mobil which has in effect lifted the basic rate for its drivers up to £121 in return for changes the company says will have a significant effect in improving operations.

Shell raised the question of separate productivity discussions for its drivers during its meeting with the union this week. Union negotiators are understood to have told the company that they were willing to discuss the union's national secretary for the oil and chemical industry will lead the union side next week in pay negotiations for refinery workers at Shell and at BP Grangemouth.

Mr. John Miller, the union's national secretary for the oil and chemical industry will lead the union side next week in pay negotiations for refinery workers at Shell and at BP Grangemouth.

Chapple says labour law may survive

BY NICK GARNETT, LABOUR STAFF

THE NEW Employment Act had a much better chance of survival than the 1971 Industrial Relations Act, Mr. Frank Chapple, general secretary of the Electrical and Plumbing Trade Union, said yesterday. The reasons were that union opposition was much less intense, and the morale of the Left and the leadership of the unions were much weaker now than in 1971.

Whether the Act survived was largely up to the Government, said Mr. Chapple. The question was whether Ministers were prepared to change their "neot" policies in order to avoid defeat at the next election.

The 1971 Act attempted to do too much all at once. One of its weaknesses was that it was designed to work without confrontation.

The new Act could become part of the industrial relations structure of a number of major spheres providing the Government accepted that some confrontation over it was inevitable. Mr. Chapple advised the Government not to try to drive the unions into the ground. The union movement,

although "split and directionless" and "crippled" by unemployment, knew how to defend itself collectively when it considered itself under unacceptable attack. Mr. Chapple told a one-day conference in London on the Employment Act.

Mr. Chapple supports some of the provisions of the Act. But he told representatives of industry that many of the new law's provisions would be an irritant to good industrial relations and that, basically, it would be of little use.

The Act's provisions would be more likely to be used by "twilight zones" of industry, and he seen as a bulldozer for industrial "spies." It would be used by "cranks," he said.

It was really up to industrial employers who believed in the Act to slow their good intentions by using it properly.

Mr. Dennis Randolph, vice president of the Institute of Directors, said at another conference yesterday that the Act did not go far enough, and that any legal attempt to create a statutory "right to strike" would be bad for industrial relations.

TUC warns Prior on pickets code

By John Lloyd, Labour Correspondent

THE TUC has told Mr. James Prior, the Employment Secretary, that the draft codes of picketing will cause widespread confusion and misunderstanding.

Mr. Prior, who met members of the TUC's Employment Policy and Organisation Committee yesterday, said after the meeting that the committee "had made a number of points that we could take into account."

However, he did not specify what these points might be, and said that the Government was determined to press ahead with the codes.

Mr. Len Murray, the TUC general secretary, said that the committee had told Mr. Prior that it believed it was "wasting its time" in talking about the codes.

"We told him we would much rather be talking about ways of bringing the level of 2m unemployed down," he said.

Mr. Prior denied that he was under pressure within his own party to make the codes law, and said that they were much more flexible than legislation. There was a generally felt need to clarify the law and for a change in practice.

LABOUR

Study of private funds for ordnance factories

BY WILLIAM HALL

THE GOVERNMENT has launched an urgent study into the future of the Royal Ordnance Factories (ROF). The possibility of introducing private capital into the organisation is being seriously considered.

A special study group has been formed under the chairmanship of Lord Strathcona, the Minister of State, Defence. It will consist of representatives of the Ministry of Defence, the Treasury, the Department of Industry, the Royal Ordnance Factories, plus private enterprise. The group is to deliver its report within the next two to three months.

ROF manufactures weapons and ammunition for armies both at home and abroad. It has been very successful. Over the

ROYAL ORDNANCE FACTORIES

	Sales £m	Surplus* £m	Staff
1975-6	149.1	12.9	20,554
1976-7	210.9	34.3	22,535
1977-8	263.2	38.4	23,749
1978-9	284.0	31.2	23,235

*after charging depreciation but before interest.

last three years, its sales have more than doubled to £284m, and the surplus on operations after interest has risen from £11m to £36.7m.

ROF operates 13 factories around Britain, and employs over 20,000 people. It is one

of the biggest industrial establishments within central Government. It appears to be a likely candidate for furthering the Government's policy of introducing private capital into state-owned industries.

At present, ROF operates as a trading fund. Its employees are classed as civil servants. It has a certain amount of independence from central Government, but it would like the freedom to act more commercially. It would like greater flexibility in its marketing arrangements, and the chance to enter into joint ventures with overseas companies.

Over half of ROF's production is exported, and with certain products, such as its 105mm light gun, it is the

acknowledged world leader. Over the last six years, it has paid about £40m in dividends to the Government and re-invested about £100m in its business.

The study group is expected to review a number of options for its future. The organisation could continue as a trading fund, or be turned into a fully fledged nationalised industry. Parts of it could be sold off to private enterprise (two factories are already managed by private industry).

Or ROF could be turned into a limited company, under the Companies Act. This would enable the Government to sell shares in the company (as in the case of plans for British Aerospace). This final option

appears the most likely. ROF suffered a setback in 1979 with the cancellation of an Iranian order for 1,200 tanks. In addition, a long strike at ROF Bishopclee, the UK's largest producer of propellants for ammunition and rockets, has affected the group's performance. This will be reflected in the 1979-80 results, which are to be released at the end of November. ROF has been forced to cut its workforce by some 1,200 over the last 18 months. But it is confident that the downturn in its business is temporary.

In 1978-79, ROF had average funds employed of £150m. It made a surplus on funds employed of 20.8 per cent, and it earned an 11 per cent return on sales.

Special State aid allocations attract £540m foreign investment projects

BY JOHN ELLIOTT, INDUSTRIAL EDITOR

FOREIGN INVESTMENT projects worth more than £540m have been attracted to the UK as a result of special allocations of £58m State aid in the past four years.

This aid is available for projects anywhere in the UK, but 80 per cent of the investments has gone to the assisted areas where other regional grants are also payable.

These figures are contained in the annual report on the Industry Act, 1972, for 1979-80, published yesterday. The report shows that, as expected, the Government had saved £110m by the end of the financial year in March through its four-month moratorium on regional development grants, introduced last June.

The report reveals that the Government topped up its statutory limits for provision of general selective aid last

January by £250m. This took its statutory limit for section 8 of the Industry Act to £1,350m, and was needed to meet commitments started by the last Government.

It is understood that £1,250m of this has been allocated to specific forms of aid, of which £1bn has been committed to companies' investment plans. But only about £400m to £450m has so far been spent.

Most of the foreign investment aid was paid out under the former Government's selective investment aid scheme. The present administration has closed this as a separate scheme, but is continuing to pay out similar forms of aid on strict criteria.

The purpose of the aid is to provide the Industry Department with extra funds, in addition to regional aid, to bid against other countries for what

are known as internationally mobile projects. It has attracted companies such as Hoffman La Roche, Dow Corning, Caterpillar, and Royal Dutch/Shell.

The scheme has been very successful in attracting inward investment projects to the UK, the report says. By the end of the 1979-80 financial year, 35 projects costing £538m had been allocated assistance.

"I need base assistance was negotiated as the minimum necessary to bring about the benefits to the economy arising from the projects. It has varied between 3 per cent and 21 per cent of project costs, averaging at 10.5 per cent."

Inward investment projects costing a total of £340m were also allocated £29m aid during the last financial year from the Act's section 7 regional aid provisions. The report says the 126 projects involved are expected to

create more than 10,000 jobs and safeguard an additional 6,800.

More than half the projects involved American-owned companies which were allocated £21.3m out of the £29m.

The selective investment scheme covered general projects as well as inward investment. By the time is closed for applications in June last year, there had been 742 applications in its three-year life.

By March this year grants totalling £106m had been offered to 188 projects costing £1bn, and payments of £14m had been made. Some applications are still being processed.

Although details did not appear in yesterday's report, it is understood that there has been only a relatively slow rate of applications for the aid arrangements introduced after the scheme was closed.

Engineering industry orders down

By Hazel Duffy, Industrial Correspondent

OFFICIAL FIGURES published today confirm that there has been a steep decline in the order books of the electrical, mechanical and instrument engineering sector since the beginning of the year.

The figures, in "British Business" (the Department of Trade and Industry magazine), take the story only as far as June. The indications since then are that the order position for much of the sector has declined further. GKN, for instance, reporting its interim figures last week, could see no improvement in the second half of the year.

New orders from the home market have declined steadily since January. Export markets held up during the first few months of the year. But in the second quarter, new export orders fell by 11.5 per cent on a seasonally adjusted basis. New home orders fell by 3 per cent during the same period, bring-

Councils face pay claim by building workers

BY PAULINE CLARK, LABOUR STAFF

LOCAL AUTHORITIES, faced with strict spending curbs, are to be presented shortly with a claim for "substantial" pay rises from their 90,000 building and civil engineering workers. The first local authority group to start negotiations in the new wage round.

Union leaders will also be presenting a package of demands for longer holidays, an improvement in special conditions payments and a reduction in the working week.

Last year, the group accepted a 13 per cent increase in line with the cash limits settlement reached with local authority manual workers. Although the building group's settlement date is November 1, compared with January 1, 1981, for the manual workers, it is likely this year to await indications of the direction other local authorities' pay negotiations take this winter.

Union leaders of the 1.5m manual workers have already drawn up a claim for a substantial increase with a warning of industrial action if employers insist on a single-figure settlement.

Negotiators for 3,500 hospital area district and works engineers, however, finally accepted yesterday a cash limits settlement of 13.4 per cent in spite of earlier warnings by members in the National and Local Government Officers' Association that a ballot would be arranged on industrial action.

The agreement not to challenge with industrial action the Health Service cash limits followed recent acceptance of a 13 per cent deal by the hospital administrative and clerical workers. The new deal is the last to tie up the 1979-80 pay round for Health Service employees.

Merger bid at AUEW held up

By Our Labour Correspondent

TALKS FOR smoothing the way for a full merger of at least three of the four sections of the Amalgamated Union of Engineering Workers remained stalled over the basic difference of principle between the white collar section, AUEW-TASS and the three craft sections.

Leaders of the four sections, meeting at the TUC on Wednesday night, agreed that the merger was desirable, but were split over the issue of the status of the national conference of the merged union.

AUEW-TASS believes that the national conference of the union should be an open debate, with delegates free from their national committees' mandate.

At the recent national conference in Llandudno, TASS complained that the engineering section had predetermined the outcome by voting in its national committee against the three constitutional changes proposed by the Labour Party Left-wing at next week's conference.

TASS has told the Certification Officer, who supervises the conduct of union mergers, that it will take legal action to safeguard its position if he allows the merger of the three craft unions to go ahead.

Chemical plant workers press for hours deal

Financial Times Reporter

CHEMICAL EMPLOYERS were warned yesterday that if they broke commitments on shorter working hours, industrial action would be considered by the unions.

The warning followed a meeting between employers and unions at which the unions said the employers asked the union side to reconsider an agreement on hours because of the recession.

Mr. David Warburton, General and Municipal Workers Union national officer, said: "We have an agreement which commits the industry to finalising a formula for reducing working hours in 1981. We have a deal and we expect the employers to honour it."

"The problems which confront our members give renewed urgency for reducing working hours. Either we have an agreement which both sides will honour or we don't. If the employers try to evade the firm commitment entered into last May then I for one, do not need advice on the logical steps to be taken."

The agreement on hours affects about 100,000 workers in three national chemical agreements.

Vickers to place 3,500 on short week at Barrow yard

BY JOHN LLOYD, LABOUR CORRESPONDENT

VICKERS SHIPBUILDERS, a subsidiary of British Shipbuilders, will put 3,500 of its hourly-paid workers at its Barrow yard on a three-day week from next Monday.

The move follows the failure of talks in London on Wednesday night between the company, British Shipbuilders and the shipbuilding committee of the Confederation of Shipbuilding and Engineering Unions.

The CSEU had tried to persuade Vickers to postpone its decision on short-time working for its hourly-paid workers. However, the company said that a strike by 1,500 boilermakers at the yard, now in its ninth week, had disrupted the work flow and showed no sign of nearing a settlement.

Vickers said yesterday that no talks with the Boilermakers' Society had been arranged, and British Shipbuilders had backed its view that it was not breaching procedure by imposing a shorter week for its workers.

The boilermakers allege that Vickers made different levels of bonus payment to various groups of boilermakers at the Barrow yard, and had breached the British Shipbuilders national agreement. It wants the same level of payment for all.

However, other unions at Vickers, which include the General and Municipal Workers' Union, the Amalgamated Union of Engineering Workers and the Electrical and Plumbing Trades Union, are now seeing their members' work cut. They are putting some pressure on the boilermakers to end the dispute.

Mersey peace move

BY PAULINE CLARK, LABOUR STAFF

MERSEY DOCKS and Harbour Company, which faced a loss of £2.5m in the first six months of this year, stepped in yesterday to avert a strike threat over 24 redundant shore-gang workers in the Port of Liverpool.

The company will today ask local union leaders to call off their plans for a Liverpool dockers strike next Tuesday, and urge them to accept the company's offer to take on the men in jobs which will use their special skills.

The shore-gang workers have been made redundant by T. and

J. Harrison, the Merseyside stevedoring company, which was at the centre of last week's threat of a national dock strike over redundant dockers.

Employers last week finally agreed to honour the dock labour scheme's provisions for reallocating redundant dockers to other employers but the ancillary workers do not come under the dockers' job protection agreement.

A mass meeting of Liverpool dockers last Monday voted overwhelmingly to support reallocation of redundant ancillary workers. Shore-gangs are in-

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THE PROPERTY MARKET BY ANDREW TAYLOR

English Property set to take part in Hay's Wharf scheme

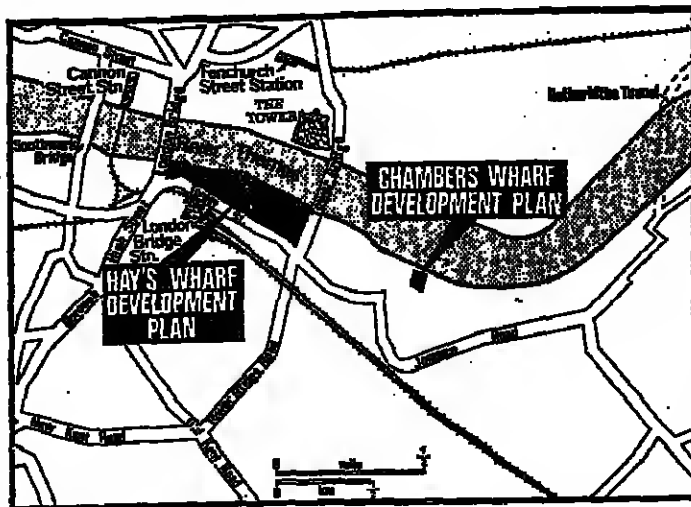
AGREEMENT HAS now been reached between St. Martins Property Corporation and English Property Corporation over EPC's involvement in the proposed 2m sq ft office scheme at Hay's Wharf which this week received outline planning permission from Southwark Council.

Agreement between the two companies was needed as EPC owns a strategic 2½ acres of land on the proposed 25-acre development site which fronts the River Thames between London Bridge and Tower Bridge.

St. Martins, following the take-over last month of The Property of Hay's Wharf by the Kuwait Investment Office, now controls the bulk of the remainder of the site. St. Martins is a wholly-owned subsidiary of the Investment Office and presently manages a property investment portfolio for the Kuwaitis, thought to be in excess of £400m.

EPC is now understood to have agreed to turn its holdings over to St. Martins and in return will take over the ownership and responsibility for developing a 21-storey, cruciform office block—a central feature of the development plans—which will provide around 300,000 sq ft of net office accommodation.

The whole development will provide a total of 1.5m sq ft of net office accommodation in blocks—some of which will be interlinked—ranging in size from 60,000 sq ft net to



166,000 sq ft net, although the cruciform block to be built by EPC will be larger than this.

In addition the plans call for 34,000 sq ft of light industrial space, 53,000 sq ft of retail accommodation plus the provision of 243 homes, three acres of parkland, leisure facilities of the council's choice and the construction of a riverside walk stretching the full length of the site.

At the same time outline planning permission has also been granted for St. Martins proposals—another inheritance from Hay's Wharf—for just over 90,000 sq ft of mostly warehousing with some industrial space at Chambers Wharf.

The whole project—expected to be funded entirely by the Kuwaitis; EPC's contribution

part—will take at least 10 years to complete and will cost substantially in excess of the £200m figure that has been mentioned in some quarters.

Apart from the loss of the land for housing—to be made over to a housing association—St. Martins estimate that the provision of planning gains such as the construction of a riverside walk could cost the company a minimum of £8m at current prices.

How quickly work gets underway—market conditions and a possible public inquiry notwithstanding—remains to be seen. But Mr. Brian Cann, St. Martins' chief executive, says that piecemeal development would not be desirable: if the development is to "create the desired impact as a major office location on the City fringes."

While the standard of property company accounting has improved and become more conservative since the 1974/75 market collapse, many leading

New look at accounts

THE ACCOUNTANCY profession is poised to take a further look at some of the more controversial aspects of property company accounts. This follows the publication of a new exposure draft on the thorny issue of depreciation charges for investment properties.

Under new rules proposed in the exposure draft the Accounting Standards Committee is recommending that investment properties should: "not be subject to periodic charges for depreciation" but instead "should be revalued annually at open market values and the valuation incorporated in the balance sheet."

The recommendations—proposed as an addition to the existing SSAP 12 accounting standard on depreciation—mark a significant victory for property companies which have argued that depreciation charges on their investments are unfair, meaningless and would have a material impact on company earnings.

However the battle ground of property company accounts is now likely to move to other areas which have disturbed accountants, particularly the capitalisation of interest charges due on money borrowed to finance new development.

The Accounting Standards Committee will also be turning its attention to other procedures like the charging to development costs of operating expenses arising from buildings which have not been fully let.

While the standard of property company accounting has improved and become more conservative since the 1974/75 market collapse, many leading

accountants remain concerned that some items which they believe should appear as outgoings in revenue accounts are still being "hidden away" in capital accounts as part of development costs.

Meanwhile the British Property Federation has expressed its satisfaction with this week's exposure draft—hardly surprising as the proposal's mirror many of the Federation's own recommendations to the Accounting Standards Committee.

One surprising omission from the exposure draft was the absence of any proposal that there should be regular external valuations of investment portfolios. The BPF had conceded

Estates showed properties incorporated in the company's books at £7.5m at either cost or 1961 valuations, compared with a directors' estimate elsewhere in the accounts that "properties owned by the Group and its investments in associated companies were likely to be worth not less than £28m."

Other companies which have been criticised for incorporating less than up-to-date property valuations in their accounts include: Allnatt London Properties with property investments incorporated in their last accounts at 1962 valuations or cost; Town and City which last had a professional valuation in March 1973 and Daejan Holdings which incorporates its investment properties at either cost or March 1972 values.

Others like Mountview Estates have incorporated freeholds and leaseholds "valued at the lower of cost or estimated realisable value." Other companies have been criticised for incorporating directors' estimates which bear little relation to actual market conditions.

Hammerson Property and Investment Trust because of its very size and influence has perhaps been one of the most criticised. Its valuations have historically been based on directors' estimates. "At the time when it is considered that the particular property has reached a stage of full development, i.e. completion of construction/leasing and/or finalisation of equity participation."

In the light of some of these situations, and others, it will be interesting to see if there will be any attempt to modify the exposure draft.

More Property News, Page 13

in its recommendations that independent valuations should take place at least once every three years.

The failure to recognise the need for independent valuations is "a major drawback of proposals which stress the importance of annual revaluations"—to be displayed prominently in accounts—but which make no recommendation as to who should carry out this task.

To be fair a large number of property companies do already carry out regular external valuations which are incorporated in accounts. Others however are more reluctant to display their wares and prefer to keep properties in their books at cost or valuations many years out of date.

For example the last report and accounts of Warnford

Lend Lease seeks UK backing for U.S. venture

MR. Gerardus Dusseldorp, chairman of Lend Lease Corporation, Australia's largest property company, was back in London this week to launch a fresh initiative to persuade UK investors to support his plans for a new U.S. real estate investment trust.

The vehicle earmarked for the new investment trust is International Income Property, established by Lend Lease in 1977 and in which the Australian company presently holds a 65 per cent stake.

The company's dilemma is that under U.S. regulations IIP cannot qualify for the special tax status granted investment trusts in that country if affiliated companies hold more than 35 per cent of the stock.

The company's first attempt to lobby British support for the venture failed last year when an offer for sale in the UK of around U.S.\$20m of IIP stock failed and left Lend Lease which had underwritten the offer with a further U.S.\$41m of stock it did not need.

Now the company has decided that if it cannot sell stock in IIP it will give it away. The company is proposing to distribute a free issue of the U.S. shares as a "bonus dividend" to its UK, Australian and U.S. shareholders.

If the distribution is approved at next month's Lend Lease annual meeting it will leave about 30 per cent of IIP shares in British hands, with ICI

Pension Fund holding a 10 per cent stake. Lend Lease will then be left with a 17 per cent holding, as will Mutual Life and Citizens Assurance, the other major shareholder.

Mr. Dusseldorp, who has an impressive track record at Lend Lease and at General Property Trust, the Australian property investment trust established by Lend Lease in 1970, was not disheartened by the difficulties he has faced.

The U.S. concern presently holds properties worth around US\$26m including interests in two major shopping developments—in one of which at Park City, Pennsylvania the Post Office pension fund has a 50 per cent direct interest. Mr. Dusseldorp estimates that distribution from earnings this year could be around 7 per cent net with IIP shares currently trading at around US\$10; on the over-the-counter market in New York.

The group is by no means out of the woods yet although contingency plans have already been laid to cope with proposed capital gains tax legislation in the U.S. which will affect foreign entities holding property investments.

The real test may come next year when, if all goes well, Lend Lease plans to raise around US\$10m through a rights issue offer to IIP shareholders. At the moment the British line, according to Mr. Dusseldorp, is cautious but not opposed to the plans.

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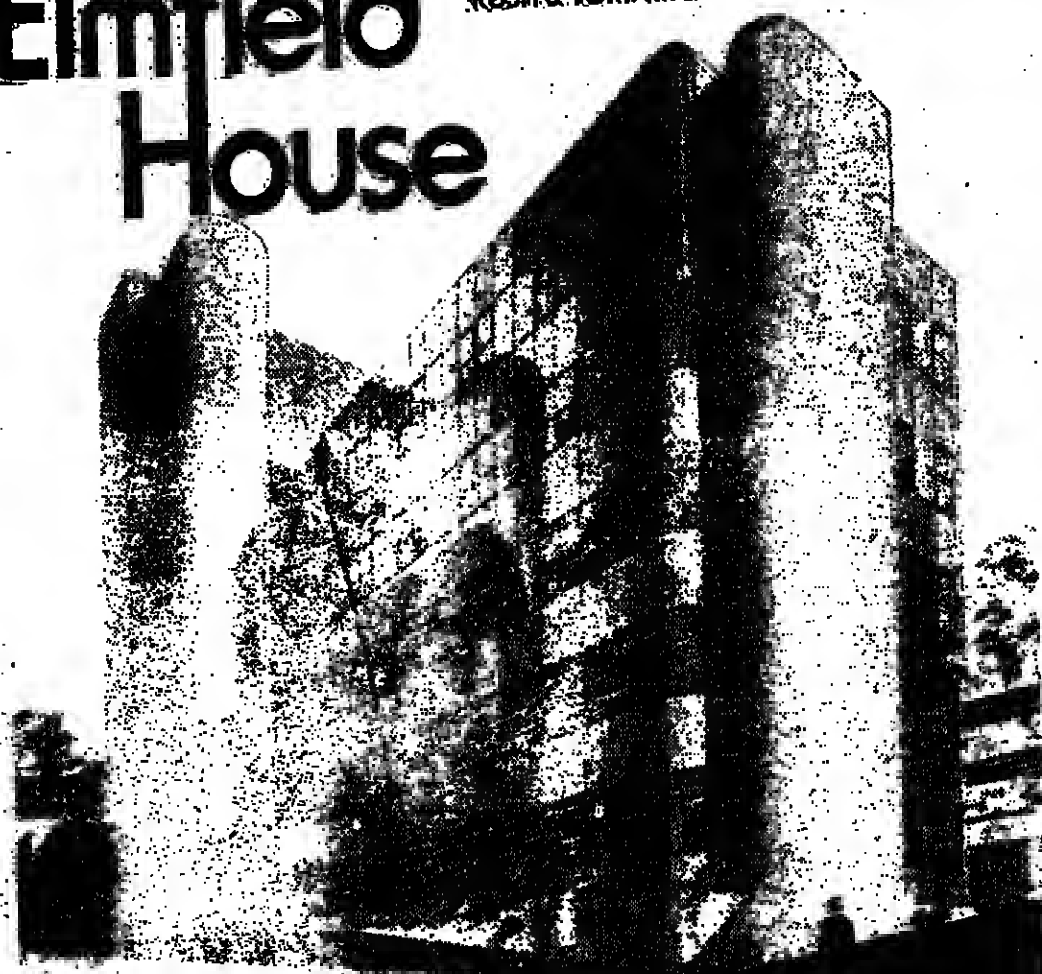
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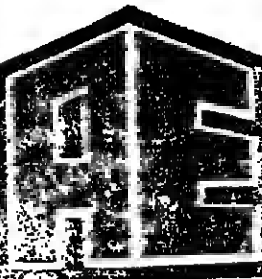
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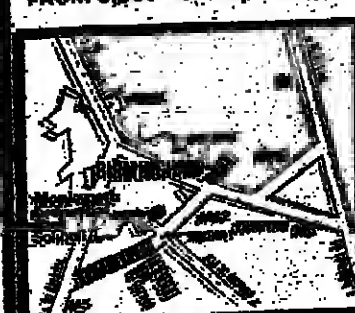
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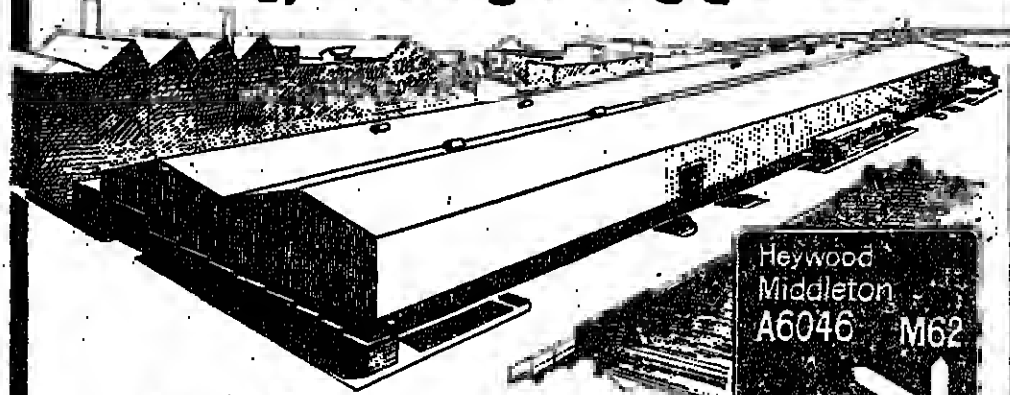
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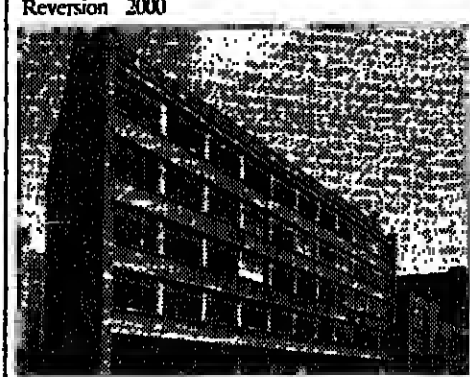
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Regional Properties has let around 33,500 sq ft of central London office accommodation in Wellington House, Strand to Shell UK on a 30-year lease at a commencing rental of £510,000 a year.

Sun Life Assurance, through its property development subsidiary Artagen Properties is to fund a £1.5m office and shop scheme at 15/19 Church Street, Twickenham. The development to be carried out by Alfred Booth Developments will provide 11,000 sq ft of offices and a ground floor shop, plus two smaller shops and 10 one-bedroom flats.

Tundra Investments NV has paid almost £2m for two office investments, totalling 18,200 sq ft, at 5/12, Norton Folgate and 6/8, Folgate Street. The overseas investment company acquired the premises, with a current annual rental of £150,000, from a member of the Banque Belge Group which

was represented by Debenham Tewson & Chinnocks.

Colonial Mutual Life Assurance Society is thought to have paid just over £1.6m to complete the purchase of the Lombard Trading Estate at the junction of Bugby Way and Anchor and Hope Lane, Charlton. The 60,000 sq ft estate provides both warehouse and industrial accommodation and is fully let at rents in excess of £2.30 a sq ft. Leavers acted for Colonial Mutual which also funded the development.

The National Freight Corporation Pension Fund has paid just over £3m to British Land for a portfolio of five freehold and long leasehold shop investments in Epsom, Stratford-upon-Avon, Hitchin, Dorking and Winchester. The shops presently produce an annual rental income of around £135,000. Strutt and Parker represented the pension fund and Conrad Rithist acted for British Land.

Shilgate Retail Systems has taken a 1,600 sq ft ground floor unit at the Euston Centre, London, NW1, at an annual rental of £15,000. D. E. and J. Levy acted for the landlord, Enston Properties.

Around £4m of residential land around Welwyn Garden City has been sold by Hillier Parker May and Rowden as part of the continuing new town sales programme ordered by the Government.

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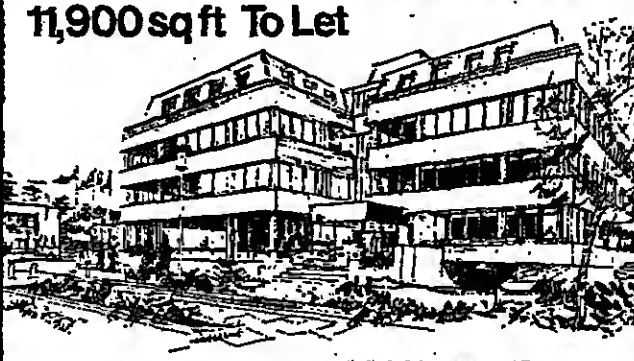
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MANAGEMENT

EDITED BY CHRISTOPHER LORENZ

The manager as a paragon of all virtues

BY CHRISTOPHER LORENZ

WHAT do the following have in common?

- 1—A diplomat.
- 2—A "renaissance man."
- 3—A decision-maker.
- 4—A negotiator.
- 5—A persuader.
- 6—A consensus-builder.
- 7—A co-ordinator.
- 8—A strategic planner.

It may seem far-fetched, but they are all supposedly one and the same person: the Manager of the Future.

The painters of this idealistic (unrealistic?) Identikit picture are a team of 40 leading businessmen and academics, half from the United States and half from Europe. On the Continent, they include the President of the University of Geneva, the Chairman of the European Bank of International Trade, and the Dean of INSEAD, the fashionable Fontainebleau business school. From the U.S. come the likes of the President of Goodyear, the Dean of Columbia University's business school and the head of the American Management Association.

Their purpose in throwing down the gauntlet to anyone foolish enough to want to be a manager in five, 15 or 30 years' time is to help him—and the business schools which plan to train him—meet the even greater challenge presented by the ever-accelerating pace of change in the business world and society in general.

Their efforts formed part of a three-year, international investigation into "management and management education in a world of changing expectations," under the joint auspices of the European Foundation for Management Development (EFMD), and the even more clumsily titled American Assembly of Collegiate Schools of Business (AACSB), which exercises supervisory authority over the curricula of U.S. business schools. In all, the project brought together 1,000 business

practitioners and thinkers from all over the world. It was concluded three months ago.

The results of the whole exercise were reviewed earlier this month at a select meeting of executives and academics under the title of "the Group of Talloires."

Taking its name from a village on the shore of Lake Annecy, in the French Alps, the group met in the cloistered calm of a former monastery. But the recurrent theme of the meeting was one of stress and strain, aptly encapsulated by one of the participants as: "Change, change faster, and still faster again." While the American participants faced this prospect with near-equanimity, the Europeans were decidedly unsettled by it.

Terrorism

The "changing expectations" identified by the three-year transatlantic project are daunting indeed, both for society in general and business managers in particular. Just about the only thing not covered under the various headings was the prospect of a Third World War. Included were:

- Changing expectations about the availability of natural resources;
- The "changing international order" (North-South relations, low growth, rising unemployment, etc.);
- Changing social and economic values;
- Changing relationships between government, companies and trade unions;
- Changing expectations of

"minority groups" (including women);

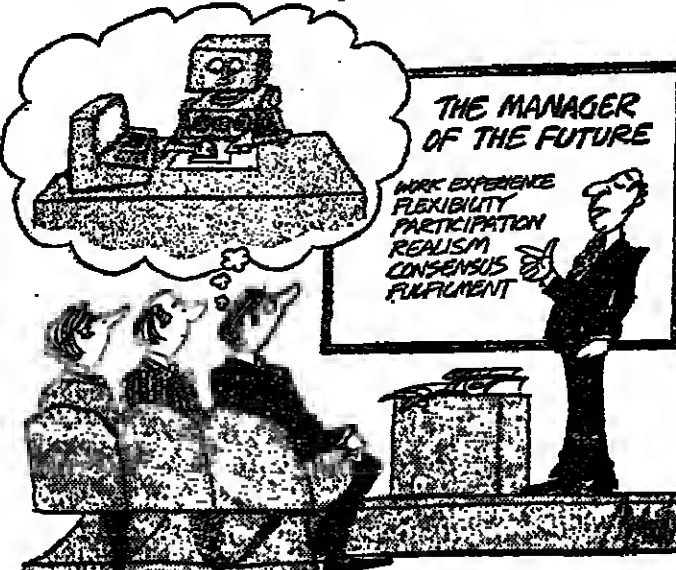
- The changing impact of science and technology;
- The growing threat of terrorism and major disasters.

How should management respond to this daunting list of growing uncertainties and changing expectations? And what tasks will the manager of tomorrow have to perform?

Dr. Robert Wade, director of international affairs for the AACSB, began by quoting a chief executive on the joint project who had bluntly answered with the single word "everything."

To start with the project team concluded that the manager would have to perform far more parallel roles than before. Whereas 10 years ago chief executives were mainly concerned with internal problems, spending perhaps 10-15 per cent of their time on external activities, today some were spending 50-75 per cent of their time on external activities, including public policy and international questions. This was only one measure of the way that political, economic and social forces—coupled with a climate of participation within the corporation—were all profoundly affecting the nature and scope of the manager's job.

One of the project's participants put it this way. "The manager has traditionally been thought of as sitting at the centre of a circle, directing all the various activities of the organisation from within it; today he sits on the periphery, on its edge, dealing with the outside world while trying to



keep an eye on what goes on inside the circle.

For one thing, government control and regulation have been growing constantly," Dr. Wade reported. Not even the resurgence of conservatism in Britain, the U.S. and elsewhere was thought likely to turn the tide.

"In addition to dealing with governments, chief executive officers are spending more and more time dealing with unions, financial institutions, consumer advocates, and a sceptical public. Their success or failure in dealing with these groups may well affect and determine the overall success or failure of their companies."

The project's participants also thought that the manager of the future will have far less

freedom of action than in the past, Dr. Wade continued. Since the organisation of the future would not be pyramidal or hierarchical, as in the past, the common view of the manager as exposed to two sets of pressures—one from above for economic performance and the other from below, resulting from the demands of the employees—would no longer hold. Rather, the manager of the future would be subject to pressures, demands, and communications coming from all sides, and at all levels.

The notion of the traditional power figure was also being replaced by the notion of a leader working by consensus through a team. "In other words, the power wielder will become the power broker."

how many small businessmen in particular let such things ride when they are grappling with day to day pressures.

While the author refrains from moralising, he does reiterate one particular point several times. Any business able to produce a history of good forecasting will increase the confidence of its financial backers. In other words, ICFI is giving fair warning of what it looks for if someone knocks on its door for cash.

Profit and cash flow forecasting, by Jeremy Prescott, available free from ICFI, 91 Waterloo Road, London SE1.

Nicholas Leslie

Some of the characteristics of this new kind of management are already fairly clear, Dr. Wade argued. While there will still be concern for the economic and technological factors, there will be much greater concern than in the past for the political, social, and psychological impact of the organisation. Hence the list of eight virtues already cited. The manager would have to earn his legitimacy and authority—and continually re-earn them, the project team suggested.

"The manager will still have to deliver the basic output of the organisation: goods, services, creation of wealth, or whatever you wish to call it," said Dr. Wade. "But in addition, he or she will be dealing with a much wider range of constituencies, doing a balancing act with these constituencies, and doing it all in the face of uncertainty, ambiguity, and sometimes mixed signals."

Another conclusion of the project was that managerial commitment and morale would have to be aggressively fostered in the years ahead. Several special circumstances related to the problem of morale were identified:

A growing alienation of managers at the middle levels, especially in Europe, concern that managers may be losing zest and enthusiasm for their work; and the growing attraction of non-profit and public institutions for managers, especially the younger ones.

To this long list of would-be attributes, put together by the transatlantic team, the Talloires group added several further points to which the manager of the future would have to respond. They include:

- 1—The changing career pattern of existing managers, including their increasing tendency to refuse promotion which involved moving home.
- 2—The increasing impact of women on the structure and pattern of the company's workforce.
- 3—The likelihood that managers would have to adapt to the increasing pace of social and technological change by switching careers—not just jobs—as many as four times in their working lives.
- 4—The importance of manpower planning, to cope with the mass of new pressures.

Of the many social challenges

outlined by the transatlantic project, the Talloires meeting became particularly engrossed in that of the rapid change in social and economic values, which they felt was insufficiently recognised by most managers. Though not all of the participants echoed Dr. Wade's view that "these changes have significant implications for the growth ethic and the profit ethic," they also have crucial implications for the organisation of business enterprises, with decentralisation of power only one of the possible consequences.

Dr. Wade emphasised in particular the following trends: a growing concern with work as a source of creative fulfilment, not just a source of income; a growing demand for flexibility in personal life and at work; and increasing pressure for participation in corporate and social decision-making.

As for the prospect of changing North-South relations, and a slump in trade between industrialised countries suffering from low growth and high unemployment, most of the Talloires participants felt "disorder" was more appropriate than the official term, "new international order."

They were equally foxed by the question of changing expectations about the availability of natural resources.

Euphemistic

The fourth issue dealt with by the transatlantic team covered relationships between the various institutions in society: government, business companies and the trade unions. While governments would feel under pressure to involve themselves more in industry, the project suggested, there was considerable—and probably growing—public disenchantment with government intervention and regulation. Equally, the public was disenchanted with both big business and the trade unions.

Issue five dealt with what the Americans call "minority groups"—which is what the Europeans, with their distaste for euphemistic jargon, prefer to call women, young people, blacks, pensioners, etc. Dr. Wade told the Talloires meeting that the project members were convinced the expectations and demands of all these groups would continue to grow, and that

society would feel an increasing obligation to them.

Sixth—refreshingly low after the incessant microprocessor mania of the last few years—came the impact of science and technology on production and employment.

Seventh came the need to devise new arrangements to protect companies and society against nuclear and other accidents, and terrorist threats. And last was the need for a global, interdisciplinary approach which allowed managers to see the interaction of the other issues.

Not content to leave the Talloires group reeling from this onslaught of challenges, Dr. Wade went on to summarise the team's recommendations for changes in management education. They included:

- To be ready to handle change, both in society at large and in the managerial world, students must be educated as specialists and generalists, not one or the other, but both;
- More emphasis must be placed on "non-cognitive" (behavioural) skills and training (for example, "interpersonal skills," communications, negotiations);
- The business environment/public policy dimension and the international dimension of the business school curriculum must be given additional emphasis;
- Work experience and life-long education need to be seen more as an integrated whole.

Readers of these unsettling inventories may not take long to ask the obvious question: if society and organisations are changing as fast as Dr. Wade suggests, how can he tell that his conception of the manager of the future will be correct when, as they say (to coin a common cliché) "the future is now"?

Dr. Wade went some way towards tending a reply by reporting the project team's warning that the future will come whether it is planned or not, and that projecting and planning "are the best way we have... ever devised to cope with the problems of change."

This did not mean that it was still possible to try and predict with certainty what will happen. In order to adapt to it ahead of time, he emphasised. But it did mean trying to understand a range of future possibilities, in order both to induce them and to develop the flexibility needed to meet them. Forecasting is dead, in other words, but Long Live Forecasting.

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Promoting financial prudence

THERE IS a small, but growing, body of opinion that "financial men" are gaining too strong a grip on many big company managements, and that they are stifling entrepreneurial flair and technical innovation.

For the medium- and smaller-sized company, however, it is quite possibly finance that is one of the weaker management skills, after technical and marketing ability. Should such companies worry overmuch about this or rely on an ability to improvise in overcoming adverse trends?

According to a new publication, *Profit and cash flow forecasts*, from Industrial and Commercial Finance Corpora-

tion, if, in the current economic climate, businesses do not attempt to forecast both profits and cash requirements, they are putting their survival in jeopardy.

As a financing institution ICFI has had understandable preoccupation with money controls. But the book does not attempt to moralise in the sense of insisting, for example, on specific debt/equity ratios. Rather, it promotes the concept of financial prudence and provides the tools for a company

to interpret that as it will.

The book is in part a straightforward working manual, with a series of schedules that a company can use to produce breakdowns on sales, cost of sales, overheads, productive capacity and a variety of other factors. In drawing up forecasts of profit, cash flow and balance sheets.

The point is stressed time and again that a forecast is not just a means of preparing a picture, but that it should be used as a basis for action, particularly if something should

happen to upset the forecast trading pattern. Indeed the author, Jeremy Prescott at ICFI's Manchester office, suggests that it is a good idea to prepare contingency plans in advance for, say, a shortfall in sales or a capital overspend.

Many of the suggestions made for drawing up check lists—such as the need to look at the trend of sales, and try to assess the effects of competition when establishing a sales forecast—seem, on reflection, rather obvious. But it is surprising

Technical News

EDITED BY ARTHUR BENNETT AND ALAN CANE

COMMUNICATIONS

More steps towards electronic mail

ONE OF the more imaginative steps towards "electronic mail," communications based on computer networks, was recently unveiled in Paris.

Group 800, a Swiss-based company which has already introduced the toll-free telephone service to Europe, announced at Scienc, the French office equipment exhibition, that it agreed with Radio-Suisse and the Computer Corporation of America to market a form of electronic mail on an international basis.

Named "Data Mail," the service makes use of the computer's memory as an electronic mailbox, with telephone lines as the means of delivery.

The system is based on the Comet electronic mailbox developed and operated in the U.S. by the Computer Corporation of America. "Data Mail" combines the software developed on the Comet system with the central computers of Radio-Suisse.

The system enables subscribers to receive, prepare, edit, send, file and retrieve messages anywhere they have access to a telephone.

All that is needed is a small, portable computer terminal which can be linked to the telephone handset through an acoustic coupler.

The user simply logs into the system which tells him or her whether there are any messages waiting. In the computer memory, and makes it possible for the user to type in messages and despatch them to the recipients. The messages sit in the central computer memory until the recipient logs in.

Toll-free telephoning is a system established by Service 800 when calls placed to subscribers' numbers in overseas countries are answered automatically and simultaneously diverted over the public switched network to where the subscriber wishes to receive the call. The caller pays local call charges; the subscriber pays the international portion at direct dial tariff rates. Obviously "Data Mail" and toll-free telephoning are natural partners.

The cost of the service involves a fixed charge of 100 Swiss francs together with a

AUTOMATION

Controls the machine sequence

A PROGRAMMABLE controller just announced by Cincinnati Milacron—the Maximiser—is intended for the dedicated control of machines or mechanisms which would normally employ relay logic and timers.

Programming can be carried out by anyone conversant with ladder diagram notation, and is performed on a separate programming / diagnostic unit which plugs into the controller.

Typical applications will be in the sequential control of plastics moulding and pressure die casting machines, machining installations such as transfer lines and in any other process where a logical sequence of operations is involved.

Programmed data is held in non volatile electrically alterable read only memory (EAROM) and in operation the unit sequentially scans the program and provides signals in accordance with the internal logic decisions and the present logic of the input signals and timers.

Unlike relays and timers, the controller can be quite easily re-programmed for a complete change of function and the program can be changed to accommodate any process variation that has to be incorporated.

Thus, the control system does not form an integral part of the machine with which it is associated and can be switched to other machines in other applications.

It can provide a virtually unlimited number of usable contacts per relay and a large number of contacts in series can also be deployed. Timings can range from 0.05 to 100 seconds.

Basic memory is 1000 16-bit words and this can be expanded in increments of 1000 to a maximum of 4000 words.

Up to 20 input/output modules are supplied as standard, each accepting up to 16 input signals and eight outputs. More are possible. Acceptable signal levels are 12 to 24 V DC or 90 to 130 V AC.

MEDICAL

ENGINEERING

First aid for heart victims

FIRST AIDERS today tackle victims of heart attacks armed only with their training and skills in heart massage and artificial respiration.

Now a new device from the U.S., which has already excited some interest from heart specialists in this country, promises to take at least some of the danger out of the first few seconds of the attack.

Called "Heart Aid," the device is basically an automatic and portable resuscitator—designed to be used by trained first aiders. It makes decisions automatically that would normally be taken by heart specialists in an intensive care unit.

Heart attacks can result in two conditions, total collapse of the heart requiring drastic measures if the victim is to be saved, or fibrillation, when the heart loses its rhythm totally and undergoes uncontrolled spasmodic contractions—possibly running at more than 200 a minute.

Cardiopulmonary resuscitation—heart massage and artificial respiration, something all first aiders are taught, keeps the blood flowing but only a substantial electrical shock can stop the heart fibrillating—and the quicker that can be accomplished, the better the victim's chances of recovery.

"Heart Aid" is an electric shock machine coupled to sensitive sensors to monitor the victim's condition. One electrode with a sensor which can detect breathing and heart rate is applied to the back of the victim's throat; the other electrode is applied to abdomen.

If the throat sensor fails to detect breathing and the heart is fibrillating, the device gives the first aider a seven second warning before delivering an electric shock.

If breathing is absent and the heart rate (the ventricular rate) is less than 25 a minute, the machine applies a pacing rhythm of shocks to stabilise the heart.

If the victim is breathing, the circuits are so arranged that shocks cannot be delivered, and the machine monitors the victim's condition.

The device costs £3,450 from the UK distributors, British Emerson Medical Electronics of London (01-580 3667), but the price includes maintenance and training in the use of the machine for eight people.

Some 250 machines have already been sold in the U.S. and the first response from authorities in the UK has been cautious but good.

SEMICONDUCTORS

Lightening the software burden

IF COMPANIES are to take advantage of electronics in the future, semiconductor manufacturers will have to design more of the software into the silicon chips. This is the opinion of Dr. Robert Noyce, vice-chairman of Intel and one of the pioneers in semiconductor technology.

Speaking at a seminar in London, Dr. Noyce said that while the cost of making silicon chips was continuing to fall, programming these complex circuits were becoming more expensive. Also, the general shortage of programmers in industry coupled with the length

of time it takes to produce software meant that the application of electronics could grow no faster than the number of programmers a company had.

During the 1980s, semiconductor designers will be developing circuits in which the nucleus of a computer operating system—now produced as software—will be already on a chip. This will allow designers to produce working systems more easily and faster, using high level languages.

Dr. Noyce said that this would reduce the "software

burden" by a factor of 10 to one. The outlook for the semiconductor industry as a whole is encouraging according to Dr. Noyce. It will be one of the few industries which will grow substantially in the 1980s.

The chief areas of growth will be in computers, automotive electronics and robotics. But few new semiconductor companies will appear in the decade to serve the broad market for general semiconductor circuits.

Dr. Noyce said that the investment necessary to set up a suitable factory had risen too steeply. In the early 1970s, the

LIGHTING

Control of street lamps

IN ONE respect the now widespread application of photocells to lamp switching on major roads is self-defeating in that they do not come on in heavy rain, snow or fog because the light level usually does not become low enough.

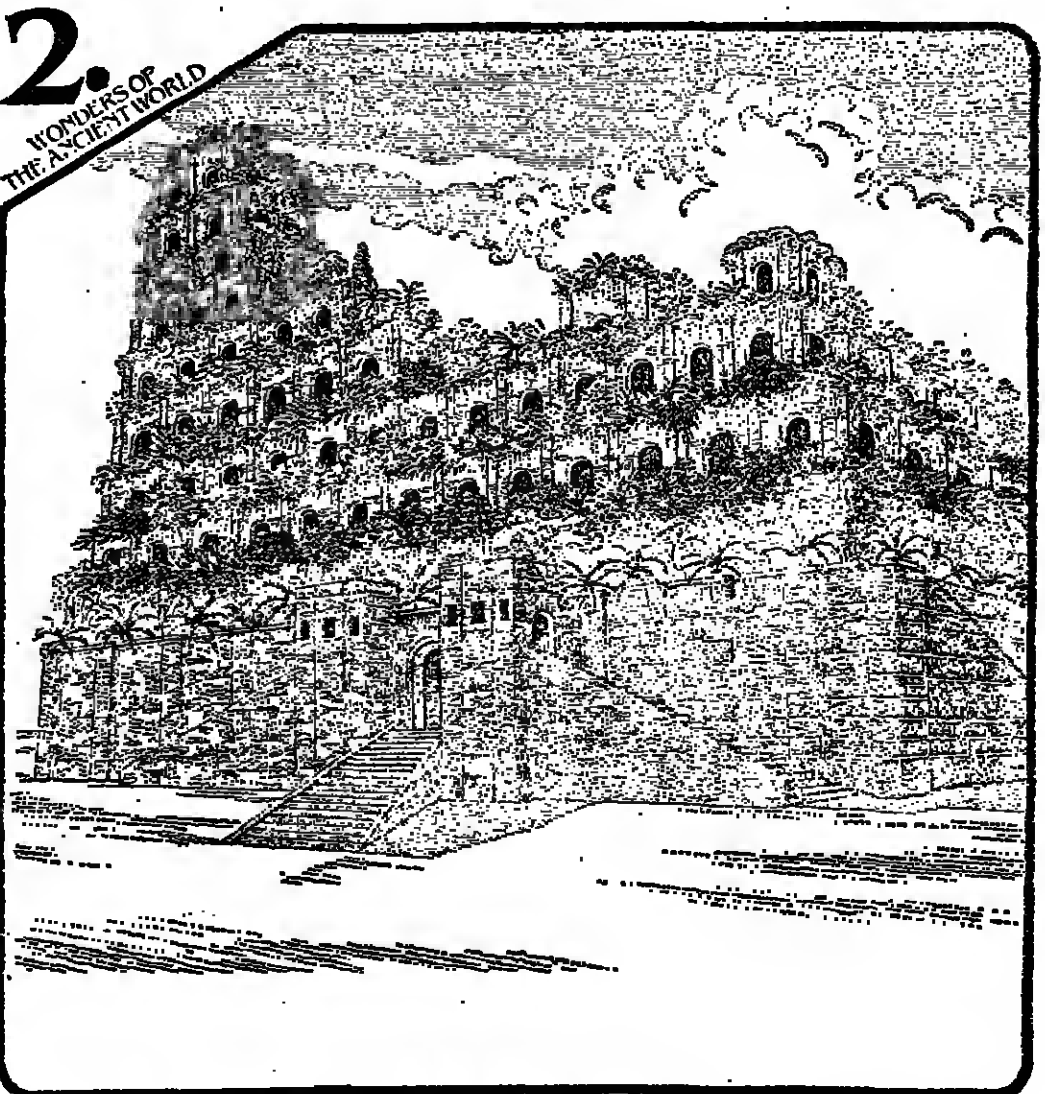
Now, Bath company Horstmann Engineering Products has attacked the problem with a system called RLSS2 which allows police or traffic authorities to switch such lamps on or off in predetermined ways from a convenient control point.

The system has been developed for the Department of the Environment and is expected to be extensively installed in many parts of the country where unusual weather conditions are prone to occur. First installations will be on a 30-mile section of the new M25 in Hertfordshire, but the system can also be retrofitted to existing roads.

Horstmann has replaced the normal photocell with a special cell which has a built-in integrated circuit able to accept overriding control signals from elsewhere.

Where a standard MCS (motorway communications system) is in use, patrol cars will be able to radio a terminal operator at traffic headquarters who will be able to simply enter the word "fog" on his keyboard. This will result in special additional signals being sent along the telemetry cables and from receiving, roadside cabinets some pulse signals will be sent to the lamps; since no signal cables exist for this purpose, use is made of the supplying mains cables.

The photocell "chip" will accept the signal and then switch the lamp on or off accordingly.



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16 LOMBARD

Exploiting our skills

BY DAVID FISHLOCK

EVERYONE knows that Britain has been the world in radio-telecommunications because of its pioneering radio-telecommunications. But that was back in the Fifties. Fewer know that as a direct result British industry led the world in the Sixties with its earth stations modelled on Jodrell Bank which picked up the whisperings of the first satellites.

Like so many other markets for novel products of high technology the one for large earth stations has long been lost to the Americans and the Japanese. It wasn't a case of Britain failing to develop a scientific invention, but of Britain failing to mount a coherent industrial policy capable of sustaining from profits the unending input of cash and skills advanced technology demands.

Indispensable

On a grander scale Rolls-Royce made precisely the same mistake in the Sixties. It gravely underestimated the financial and other resources needed to translate a brilliant new three-shaft concept of aero-engine design into the RB-211. A decade later it can point to 700 engines in service, including those for the North Sea, with new developments in the pipeline which suggest a production of at least 250 RB-211 engines a year in the early 1980s. Top of its attractions for airlines, Rolls-Royce engineers say, is that they expect to maintain a 4.5 per cent advantage in fuel consumption over all rivals throughout the decade. This fuel economy is a direct result of harnessing high technology; of more advanced materials operated at higher temperatures.

But bad Rolls-Royce became a more typical British industrial situation. It would have vanished in 1971. Only the fact that it was an indispensable source of engines for military aircraft, warships, and submarines obliged the government to keep it alive as a state-owned organisation.

With publication today of the eighth report from ACARD, the Advisory Council for Applied Research and Development—the body which has replaced the office of the government's chief scientific adviser—it is becoming increas-

ingly clear that the development gap from which Britain is so often said to be suffering is in a significantly different place from the one normally perceived.

The truly serious gap is not that due to the reluctance of British scientists, engineers, inventors to launch into manufacture with their ideas. The real gap is far more wasteful of resources. It is the hiatus left when companies launch themselves enthusiastically upon the neck of some new technology, only to come a cropper because they failed to realise how much it would cost. It is a post-development gap.

EMI is a classic example of a company which, armed not only with a brilliant invention but with an unusually realistic estimate of what it might cost to launch the new product, still underestimated the eventual scale of effort required to compete with U.S. industry.

The latest ACARD study surveys "information technology," a vast tract of fast-advancing technology embracing telephones and telecommunications, video systems and word processors—and of course the ubiquitous computer which now lurks behind each one. It finds a marvellously innovative picture in Britain, with such projects as Prestel and System X, and a strong presence in "software," the craft of computer programming which determines whether and how the new technology works.

But ACARD also finds ample evidence of post-development gaps yawning wide in the 80s. It finds too many British companies competing in every promising sector; too many "sponsoring" ministries and departments, each with its own idiosyncratic requirements, each encouraging someone to tailor the innovation precisely to its want.

AGARD's urgent message is that if the Thatcher Government expects industry to win and hold a significant slice of the looming £10bn-a-year world market for information technology, a single department of government must orchestrate the national effort. This probably means that the BBC, police, armed forces, Post Office, hospitals, schools—even the taxman—must all defer to the technological choices of the Department of Industry.

WHEN THE comedy series *The Good Life* was launched on television a couple of years ago it featured a couple who decided to opt out of the rat race of office life and turn their back garden into a self-sufficient smallholding.

The rhubarb was turned into wine, the eggs were sold, the cabbages eaten, and though the neighbours were somewhat sceptical, it was all a very jolly affair interspersed with the occasional financial hang-ups.

The good life, in real life, is very different. The good life, in reality, is a tough life. It is a life in which errors are expensive, the bank manager is an important figure, and money has to be borrowed and paid for at 20 per cent.

Even if the tangible returns are low the intangible rewards of doing your own thing are still sufficiently high to attract people to take a risk. Nowhere is this more evident than around Lampeter in West Wales where scores, perhaps hundreds of English, have taken a chance on doing something different.

English immigrants are "thick on the ground" according to Nigel James, local branch secretary of the Farmers Union of Wales. Not all the incomers, though, are Good Livers. Many have moved from farms in England.

Lampeter is a very Welsh

part of Wales. Two out of every three local people speak Welsh as their first language.

Newcomers entering this environment frequently experience a culture shock: the chapel is still a potent force, even if a declining one. In return they are inflicting the neighbourhood. Half the children in some of the primary schools are the sons and daughters of English people. English is now the language of the playground.

The newcomers are not disliked. Bessie Williams, a farmer's wife who works as a secretary in Lampeter, says: "There is no resentment here, though we don't like the bibles. The English are more reserved than we are, but so long as they join in things they are very welcome."

It is the hippies who inspire resentment. "Come into Lampeter on a Thursday and it looks like Kabul around the Social Security office," says Hefin Davies of Evans Brothers, a local estate agent.

One of those who made the switch from urban to rural life six years ago is Peter Segger, now 34. He has his own business marketing scallops, which he had started after working for some years for Associated Fisheries.

He chose a small, run-down

smallholding, Blaen Camel, at Cilcennin, about eight miles north of Lampeter. He has turned it into a market garden producing tomatoes, peppers, cucumbers, vegetables and wheat, all organically grown.

Patrick Holden, aged 29, and his wife Lou arrived at Bwlch Wern Farm at Llwyn y Groes, also outside Lampeter.

Those days have gone and things are a lot better. But I shall have an overdraft of £20,000 with the bank, and that is costing me about £4,000 a year. I'm just about to reduce it as I'm getting a loan of £8,000 from someone who believes in what we're doing, and she's only charging 10 per cent.

What Peter Segger has found is that while West Wales is not necessarily so for organically grown vegetables they do appreciate taste and quality. "It's very difficult getting fresh vegetables around here. This is dairy country and so there's not much local produce. Most fruit and vegetables come from London, but ours is locally grown and its appearance is good. That's what people like."

Mr Segger has been able to cushion his initial costs with the capital he had from selling his business. The Holdens admit life has been difficult. We have had a considerable struggle since we came. This was due to my inexperience and to the lack of initial capital.

"But it has been worth it and things are coming right. I am not a crank nor are any of



In 1973, a year earlier than Peter Segger, they had come from the south-east of England with another couple whose parents had bought the farm. They also intended to farm organically.

But communal life did not work out as expected. The other couple left, the farm was put back on the market and by a stroke of luck bought by someone who gave them a tenancy agreement. They now have protection for life.

"I wouldn't have changed it, but it has been very hard. In the early days something

Bustomi's speed a key factor

THE SUBSEQUENT Irish Derby winner Tyrnaw, landed the Mornington Stakes (then the Roberre Trophy), on the same afternoon at Ascot a year ago, and everything points to the race again proving informative. This time the runners include Bustomi, King's General, Centurion, and Ganymede.

There seems little doubt that the West Hisey representative, Bustomi, and Guy Harwood's King's General will head the

King's General came from some way off to outclass Junta and nine others in the Rhine and Moselle Stakes at Goodwood eight days later.

Although the Rhine and Moselle prize was a slightly more valuable one than that for the Sanction Stakes, Bustomi almost certainly encountered stiffer opposition at York. However, the ground there was riding fast and it is yet to be seen whether Bustomi will prove equally effective on going which will be on the soft side of good, given a further heavy shower or two.

Centurion, a full brother to Grundy, caught many an eye when holding off all but Kalaglow in Sandown's Viewport Stakes over today's seven furlongs. A progressive finisher still backward colt, Centurion is likely to be sent for home some way out by Walter Swinburne. Ganymede, for whom Luca

Cumani has secured the services of Lester Pigott, sprang something of a surprise at Yarmouth a month ago when beating Pigott's mount, Empress Carlotta after drifting from 7-2 to twice those odds. However, there was no semblance of fluke about that success, and he, too, plenty of improvement in him.

In what should prove a fascinating race, I am content to rely on the speed and experience of Bustomi.

ASCOT

2.15—Hearth
2.45—Mister Luck
3.15—Miss Raffes
3.50—St. Terram
4.20—Bustomi
4.50—Queen of Persia
RED CAR
2.30—Orkney Annie
3.00—Highcroft
4.00—Song Sung Blue

highlighted 11.30 Reflections. 11.35 The New Avengers. 12.30 on North Headlines and Road Report.

GRANADA
1.20 pm News Headlines and Road and Weather Report. 5.15 M. and Mrs. 6.00 Granada Reports. 6.30 Kick Off. 10.30 News. 10.30 Report Extra. 11.00 Goll highlights (Bob Hope British Classic). 11.30 Doctors' Private Lives.

HTV
1.20 pm HTV News. 5.15 Spideon. 6.00 Report. West. 8.30 WKRP in Cincinnati. 7.30 Tanspand and Brown. 8.00 News. 10.30 News. 10.30 Report Extra. 11.00 Goll highlights (Bob Hope British Classic). 11.30 Doctors' Private Lives.

HTV Cymru/Wales—As HTV West/HTV Central service except 5.30-5.50 pm Gymru. 12.00-12.10 pm Cae Cychod. 12.10-12.20 pm Cae Cychod. 12.20-12.30 pm Cae Cychod. 12.30-12.40 pm Cae Cychod. 12.40-12.50 pm Cae Cychod. 12.50-1.00 pm Cae Cychod. 1.00-1.10 pm Cae Cychod. 1.10-1.20 pm Cae Cychod. 1.20-1.30 pm Cae Cychod. 1.30-1.40 pm Cae Cychod. 1.40-1.50 pm Cae Cychod. 1.50-2.00 pm Cae Cychod. 2.00-2.10 pm Cae Cychod. 2.10-2.20 pm Cae Cychod. 2.20-2.30 pm Cae Cychod. 2.30-2.40 pm Cae Cychod. 2.40-2.50 pm Cae Cychod. 2.50-3.00 pm Cae Cychod. 3.00-3.10 pm Cae Cychod. 3.10-3.20 pm Cae Cychod. 3.20-3.30 pm Cae Cychod. 3.30-3.40 pm Cae Cychod. 3.40-3.50 pm Cae Cychod. 3.50-4.00 pm Cae Cychod. 4.00-4.10 pm Cae Cychod. 4.10-4.20 pm Cae Cychod. 4.20-4.30 pm Cae Cychod. 4.30-4.40 pm Cae Cychod. 4.40-4.50 pm Cae Cychod. 4.50-5.00 pm Cae Cychod. 5.00-5.10 pm Cae Cychod. 5.10-5.20 pm Cae Cychod. 5.20-5.30 pm Cae Cychod. 5.30-5.40 pm Cae Cychod. 5.40-5.50 pm Cae Cychod. 5.50-6.00 pm Cae Cychod. 6.00-6.10 pm 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THE ARTS

Cinema

A deadly Don Giovanni by GEOFF BROWN

Don Giovanni (A)
Academy Cinema 1
Electric Shadows: 45 Years
of Chinese Cinema
National Film Theatre
Dressed to Kill (X)
Odeon Leicester Square
Simon (A) Warner West End

Joseph Losey's film of *Don Giovanni* could certainly never be confused with any theatrical production. While latecomers to opera houses are still drifting in and removing their coats to the sound of the overture, we at the cinema are watching a demonstration of glassblowing in a Venetian factory. Once Act One begins we have real, live, beautiful buildings by Andrea Palladio instead of cleverly painted sets, and boats slowly progressing along canals instead of characters spottling in a vacuum. And we can see them all without binoculars. Opera audiences hear the music of

Mozart's masterpieces as it happens, with the sounds of occasional buffed notes, coughs and dropped handbags. We hear it post-synchronised to the cast's lip movement, with the sounds of footsteps, horse's hoofs, grasshoppers, farmyard hens, torrents of rain and splashing oars. We share this experience in a compact building that resembles an opera house as much as a brown paper bag resembles a box of chocolates. Seat prices are somewhat lower.

Both Losey and the film's instigator, the composer and opera administrator Rolf Liebermann, wanted to make *Don Giovanni* not so much a filmed opera as a film derived from an opera, partly in the hope of democratising the art form. Noble intentions, perhaps, but making a film destined for art-house exhibition is hardly the best way to broaden an audience. And despite all their combined intelligence, their

careful attention to both visual and musical matters, the result—as in so many previous attempts—comes perilously close to achieving the worst of both worlds.

The film lasts three hours (an interval is fortunately provided), and there is certainly time enough in that span to accustom oneself to a small number of irritants. Subtitles, for instance (it is surely gilding the lily to read "I'm fainting!" while Edda Moser's Donna Anna is not only singing about her condition in full-throated Italian but also crumpling to the ground before our very eyes!). Depending on the audience's standards of musical appreciation, it may also be possible to allow the variations in sound quality, the poor standards of post-synchronisation and the fluctuating barrage of sound effects. But even three hours is insufficient to accommodate oneself to the rigidity and aridity of the entire exercise, or the posturing of most of the performers. It is, like so many stage artists previously yanked onto the silver screen, still emotive on a scale to shake the chandeliers in the opera house roof. There are two exceptions: the graces of Ruggiero Raimondi's Don Giovanni are entirely suited to this furiously diabolical character, who set new standards for prodigy in the eighteenth century. But the film's real saving grace is undoubtedly Kiri Te Kanawa, a singer of radiant tone and striking beauty, who plays Donna Elvira, Giovanni's poor wife; she alone makes the complete transition from opera to film, combining intensity of emotion with subtlety of expression. And she alone brings a spark of human life to a chilling film, far too fastidiously decked with elegantly roving camerawork, frozen tableaux and the traditional bustling extras.

Opera also plays a key part in *Two Sons*, shown to the press to herald the arrival next Thursday of the National Film Theatre's ambitious selection of Chinese films, enticingly entitled "Electric Shadows" (the film itself can be seen towards the end of the season, on October 26th and November 2nd). The two performers sing and act with a theatre troupe through periods of great economic hardship in the thirties; in the forties, one of them suc-

cumbs to the wiles and wealth of a Shanghai opera manager, while the other ploughs ahead working towards a political awakening of the theatre (and herself). After the revolution, in the fifties, the stage sisters are reunited, and the very last scene has the heroine telling her wayward partner, "Let us remould ourselves earnestly and always perform revolutionary operas."

It is an unfortunate line, or at least an unfortunate subtitle, for the film as a whole—produced in 1954 by the Tianma Film Studio in Shanghai just before the Cultural Revolution disrupted all serious artistic activity—displays so little of the threadbare thought and emotion generally encountered in works enforcing a country's official ideology. The NPT programme booklet points out its "captivating mise-en-scene"; the valuable BFI Dossier produced to accompany the season (priced at £2) praises its "stylistic approach that is almost Opulism in its precision and sensuousness." This is overstating the case; the comparison that jumped into my head was not Opulism at all but Warner Brothers melodramas with Olivia de Havilland and Bette Davis bitching with each other over men and careers. But the director Xie Jin certainly knows how to move his camera around and locate his characters within their geographic environment; he also knows how to handle colour and visual design, and coaxes performances of great clarity and sympathy from his cast. And unlike Warner directors he also knows how to root the roots of his heroines in something more substantial than melodramatic tricks of the trade. But it would be foolish to pronounce on the qualities of a country's entire national cinema on the strengths of a single film: one can only hope that the initiative and enterprise of the NPT and the season's organisers Tony Rayns and Scott Meek will be matched by the initiative of audiences in delving into such uncharted territory. (A short selection of films from the season also begins on BBC television this Saturday).

Dressed to Kill, starring Michael Caine, Nancy Allen and Angie Dickinson (returning to the screen after untelegenic seasons as TV's *Police Woman*), is written and directed by Brian

De Palma—himself accomplished at making his own films dressed to kill with insistent music incredibly elongated climaxes and shoals of red herrings. This new opus reunites him with producer George Litto from his first large-scale success, the heavily Hitchcockian *Obsession* made four years ago, which finally pulled him out of the ranks of Hollywood's promising young oddballs. Once in the mainstream he has sadly seemed much less promising, take away the surface dressing from *Dressed to Kill* and you are left with an appallingly inchoate script, silly characterisations and a great deal of meandering camerawork. Most of this meandering accompanies the frenzied thoughts and actions of two females—Angie Dickinson's housewife (burdened with erotic fantasies) and Nancy Allen's callgirl—harassed by a blonde killer equipped with dark glasses and a razor stolen from the office of Michael Caine's psychiatrist. If this sounds like the stuff good nights out are made of, then do please, go along: viewed under congenial conditions *Dressed to Kill* will certainly churn up a nauseous insides. The problem is that it accomplishes the task with so little imagination or finesse, so little regard to the audience's intelligence.

Lastly, there is *Simon*, a film comedy that starts brightly only to backfire, though in the present desolate climate even comedy that backfires has some merit. The writer/director is Marshall Brickman, Woody Allen's co-writer on his beguiling futuristic romp *Sleeper* seven years ago, and the present film carries more than a few echoes—playing around in the same way with modern science and technology. The lead comic is Alan Arkin, a university professor groomed by dedicated pranksters as the world's first visitor from outer space; also involved are the underused Anstin Pendleton, the delightful Judy Graubart and Madeline Kahn. Brickman gives them undeniably funny things to say, and pertinent remarks are made, about such American phenomena as muzak, diet books, hot air driers and Fred Astaire. But he also fritters away the force of his film by too much repetition and an incapacity for isolating the good jokes from the bad.



Della Jones, Alan Opie, Anthony Rolfe Johnson and Felicity Lott

Coliseum

Così fan tutte by RONALD CRICHTON

English National Opera's first *Così fan tutte* for many years opened at the Coliseum on Wednesday with Sir Charles Mackerras as conductor, John Cox as producer and Roger Butlin as designer. In spite of the small numbers involved *Così*, given adequate musical performance, is a tough piece able to hold its own in a large theatre quite as securely as the *Flute* or *Figaro* or *Don Giovanni*. In a house the size of this one, however, the miniature, sham-rocco treatment is inappropriate. Mr. Cox, no doubt for other reasons as well, has treated the opera seriously and thoroughly in big sets with wide vistas. Mackerras has ensured a generous musical text with all three tenor arias and more of the recitative than we always hear.

The English version used is the old one by the Rev. Marmaduke Browne with which many of us, in the theatre and in the pages of the *Novello Edition*, grew up. Browne made his version for Stanford's 1890 performance with RCM students which sowed the seed of *Così*'s renewed popularity after years of 19th century neglect. Not even the nineties could face the moral implications of *Così*, and Browne's ingenious rhymes are partly spoiled for us by tactful prudishness about what da Ponte actually allowed his characters to feel and say. Mr. Cox has toned him up. The grafting process is smooth on the

whole, but I wonder why Despina's "Rout them with coquetry whim and caprice" had to become "Flout them and jilt them whenever you can."

The sisters are not silly girls but impulsive, inexperienced young women. Felicity Lott (Fiordiligi) and Della Jones (Dorabella) both suggest that Ferrando and Guglielmo will have their hands full later on. Miss Lott's Fiordiligi is now a beautifully rounded performance lacking only a touch more of exaggeration in "Come scoglio" (the second and greater aria was admirable) but already most sensitively balancing high comedy against the sudden attack of unexpectedly deep sentiment. Miss Jones's firm, full, clear attack does not suit the pseudo-bysteries of "Smanie impicabili" but elsewhere gives sterling value. Her treatment of the dialogue should open the ears of any opera goers still unconvinced that secco recitative in English is an effective dramatic medium.

The men are less positively drawn. Anthony Rolfe Johnson sings Ferrando's arias most musically even though we know his voice can (and surely will) run more sweetly. Alan Opie indicates Guglielmo's doubts and thoughtfulness nicely enough in a gently melismatic way that does not make quite the right contrast with the youthful, only slightly greying Alfonso of Neil Howlett, silly of voice and

manner. There is a strong Despina from Marilyn Hill Smith, downright English except for a thread of Latin acid in the tone, masterfully avoiding the pitfalls of the role except for the hoary, traditional and possibly unavoidable sneeze of the bogus lawyer. The white plastic mugs that fell over and rolled about the stage in the breakfast scene were presumably not the singers' choice.

The settings, in a style Mr. Butlin has used before, combine not very comfortably architectural elements with (very well) painted hackcloth reproductions of paintings or prints. The action has been updated some years and Jane Austen is quoted in the programme. This means more cheesecake-cream and when not that, chain-store pastel shades for the sisters' costumes.

In the orchestra pit Mackerras and his players were in great fettle. Speeds were lively but only worryingly so in the first act finale. Details, from the wind especially, were unusually clear. Except at one or two moments when a character moved upstage ensembles went with a fizz and were vocally soundly integrated. The decorations which apparently upset some visitors to Aix this year seemed appropriate, and were fluently sung. With some attention to the first act—lighting especially—this should make a durable enough framework.



Ruggiero Raimondi as 'Don Giovanni'

Comedy

Colette

by B. A. YOUNG

Colette, written and composed by John Dankworth, is not aimed at the devotees of French literature but the devotees of Cleo Laine. It consists of a run of 17 songs, with seven reprises, for Miss Laine and Kenneth Nelson. *Colette*, the writer, is the subject of the songs, and John Moffatt, wearing a crimson suit such as might have decked Ken Tynan, contributes a spoken commentary setting out the main points of her life. Miss Laine is quite capable of acting the part—I've even seen her as Hedda Gabler—but this is only a singing evening; she wears a Colette wig and Colette dresses, with glasses to indicate increasing age, and that's about it.

The songs are pretty enough, but desperately short of character. Time after time we hear stock phrases from the merchandise of popular music, and the lyrics are full of familiar clichés like "We'll stick together, whatever the weather," "the heavens above" and "June light, moon light." Mr. Moffatt's narrative is a bit like that too, and the wit that commended *Colette* to her first husband

Willy comes out as comic one-liners in the music-hall tradition.

Mr. Nelson plays all three of *Colette*'s husbands, Willy, de Jouvenel and Goudekot. He also plays her girl-friend Missy, but although he has a dance routine in this character he is thankfully not asked to sing. When he sings in his own voice, he is pleasant enough, though he doesn't do much in the acting line either.

Miss Laine's fans will have little to complain of, for she sings almost the whole evening. But I think Mr. Dankworth owes it to us to reveal the sources he has used in his depiction of society life in Paris. What was the 19-year-old Raven doing *en cote galère*? Was the young Gertrude Stein looking for a flat to enable her to move there nine years later? As for the 72-year-old César Franck, whom we thought had been dead for four years, he must have found them all a pretty odd lot. Wendy Toye, the director, might have introduced some local colour by giving him a love-scene with Augusta Holmes.

Old Vic

The Merchant of Venice

At last there are signs that the Old Vic is pulling itself together. Hang on, that sounds a little ungenerous. Michael Maccham's production of this intrinsically unpalatable play is not merely respectable, it is beautifully designed, by Adrian Vaux, and very well acted, even allowing for a Gratiano who grabs too fiercely at his verse and a Portia (Maureen O'Brien) who squeaks a good deal before finding her correct vocal level in the trial scene. Venice has been visited by the Restoration. Antonio's mob are a collection of gallants in tricorns and pastel-coloured frock coats. The handsome fagades are barricaded with scaffolding which allows Lorenzo to clamber up to Jessica's window before declaring to his friends that, despite being Jewish, she is really one of them after all. In the background there are discreet mural quotations from Canaletto and Botticelli as soft visual aids to the intertwining themes of commerce and romantic love.

The production refuses to comment on the play beyond laying it all out clearly and taking the plot as it comes. As is usual nowadays, *Shylock* is presented as less of a monster

than a dignified operator within unsavoury guidelines. Timothy West manages at the same time a magnificent dignity: his Sephardic locks are topped by a grubby tricorne and he is obviously a businessman of stature in a society that values success but is only too ready to despise it in the name of priggish righteousness. He touches his doopstrop mezzuzah with casual ritual each time he appears from view. And in the face of Christian scorn, he fixes his gaze on the middle distance and unceremoniously allows his faith to speak through his replies. When Antonio's breast is bared, he flashes the knife only to be stopped in mid-flight. And from that moment his destruction is sealed by a glowing court from which he retires a drained and crumpled image of his former self.

After that, despite the apparition of a balustraded Belmont and the atmospheric lighting of Brian Harris, the smirking confusion of the exchanged rings is less of a coda than an anti-climax. Gentle vindictiveness tears through the translucent poetry as we learn of Antonio's ships landing at Rhodes and the settlement of Shylock's estates on Lorenzo.

No attempt is made to defuse the racist content of the piece. When the Prince of Morocco departs, Miss O'Brien positively glows as she stage-whispers "Let all of his complexion choose me so!" Jeffery Kissoon's Prince is no black buffoon, however. He is an exotic adventurer, magnificently attired, whose promises of derring-do transform him almost into an embryonic Othello. Even more mileage is extracted from the second suitor, the Prince of Arragon, whom Bernard Archer (doubling later as the Duke) plays as a grotesque replica of the fool's head he finds in the casket, glittering precariously around the stage with a severe attack of the knee trembles. Unlucky Gratiano appeared then to utter the line "And when your honours mean to sodomize the bargain of your faith" when they should mean to solemnize it.

Other memorable moments include Mr. West's agonised juggling of emotions when all is lost and he remembers Leah's jewel; and the vicious spit delivered by Antonio (David Sumner) as Shylock comes at him with the knife. MICHAEL COVENEY

South Bank

ECO/Danby by PAUL DRIVER

The most hectic of encumbrances would scarcely do justice to the dazzling, moving performance of Mozart's *D minor Violin Concerto* given on Wednesday by the 17-year-old German Anne-Sophie Mutter. Not since Yehudi Menuhin's young days can there have been precocity like this—absolute mastery of technique matched by finished artistry and luminous musical understanding. Miss Mutter is an already celebrated protégé of Herbert von Karajan and has made three recordings with him. She shares his inclination for an immaculately woven, rich spread of sound; has his infallible rhythmic sense (and an infallible sense of intonation); and commands a similar platform presence: one of cool, certain aplomb, putting her utterly in control of herself, the music and—most frightening of all—of the audience too. (She cut short the third ovation with a decisive gesture.)

Yet for all her impressive statuesque pose, Grecian profile, teutonic charisma, she retains girlishness and warmth. (Often she would wipe her hands on her dress with childish unselfconsciousness.) Her playing is as natural as breathing; her movements are beautiful to watch; the sense that her whole self is con-

summated in her technique and expression was affecting. Her range is wide—there are no weak links in her favours at all. Though she plays a burnished, gorgeous tone, it has always a ringing clarity. She can draw a magnificent silvery tone too, or the most evanescent but sustained whisper (as unforgettably at the end of the slow movement). And how effortlessly she projects her sound, filling the auditorium.

I found her sensuous, romantic approach to the Mozart concerto highly appropriate. It is bigger, more bodied music than is always conceded. Interpretive nuances were in bewildering profusion: Miss Mutter's real distinction—which raises her above any mere *wunderkind*—is in the quickness of her musical intelligence: she is invariably ahead of you with an apt subtlety; an impassioned portamento at the B minor beginning of the first movement's development made startling structural sense; not only was the first cadenza (like the two succeeding) impeccable of double-stops and figuration, but Miss Mutter knew just how significant were its echoes of the concerto's martial opening, here only recurring.

The members of the English Chamber Orchestra provided ideal accompaniment. They had given Dvorak's Czech *Suite* on 39

—its Romanza tender, effluent, well moulded; its "Furiant" finale full of what might be termed splenic good humour—and went on to play Brahms's 2nd major Serenade. The conductor Sir Alexander Gibson's jerky gestures seemed as usual rather beside the point here. At any rate he brought off a lovely, cogent account of a forthcoming but puzzling piece of music.

At 5.55 pm on Wednesday the GLC's annual series of organ recitals at the Festival Hall was opened by Nicholas Danby. This year it will be pretty well devoted to Bach: 11 all-Bach programmes and 10 "mixed bags" in which Bach will share the hour-long space with other composers.

Danby's programme was interestingly chosen, exquisite inventions like the quasi-instrumental D minor Prelude and Fugue (BWV 538), the melodious G minor Fugue (BWV 578) or the tiny chorale prelude, *Liebstes Jesu, wir sind hier* (BWV 730), brought face to face with edifices like the E minor Prelude and Fugue (BWV 548). His playing for most of the time was satisfying enough—workmanly and a bit colourless. He saved himself, though, for a reading of the E minor work of brilliant splendour and shattering force.

A FINANCIAL TIMES SURVEY

BRACKNELL

NOVEMBER 13 1980

The Financial Times proposes to publish a Survey on Bracknell in its edition of November 13. The provisional editorial synopsis is set out below:

INTRODUCTION Bracknell is a new town success story. Set in appealing Berkshire countryside less than 30 miles west of London, it has no difficulty drawing in an enviable mix of clean, mostly high technology industry. Several major companies have chosen it for national administrative headquarters. Unemployment, even with the gathering recession, is low and the quality of life high. In 1982 the Development Corporation will wind up and hand over its work to the New Towns Commission. An overall view of this town of 50,000 people and the legacy the Corporation will leave.

Editorial coverage will also include:

INDUSTRY The home of many top electronic companies, the reasons why they and the BMW (GB) headquarters have been drawn there.

COMMUNICATIONS Good facilities are improving with the major new relief road to the west and the opening of the M25 London orbital motorway to the east.

EXPANSION Earlier this year, the Department of the Environment announced that central Berkshire must provide 8,000 homes additional to the 31,000 already planned.

COMPANY PROFILE

EXPERIMENTS IN LIVING

RECREATION AND LEISURE

Copy date for advertisements is October 30.

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FINANCIAL TIMES
EUROPE'S BUSINESS NEWSPAPER

The contents, size and publication dates of Surveys in the Financial Times are subject to change at the discretion of the Editor.

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Friday September 26 1980

The CAP no longer fits

THE BATTLE over the European Community's budget for 1981, which is now under way in Brussels, is falling into a wholly predictable, and profoundly sterile pattern. The vicious circle can only be broken if the debate is focused on the root of the budgetary problem, and that is the cost of the common agricultural policy. If the member governments go on pretending that they can turn a blind eye to the crying need for a radical reform of the CAP, they will be doing the Community a grave disservice. In that sense, we agree with the verdict of the Commission that the ministers are being irresponsible, though not for the reasons given by the Commission.

Existing rules

It is obvious that there is something wrong with a political system which devotes three-quarters of its financial resources to a relatively small (and declining) segment of the Community population. The Commission wanted to rectify this imbalance by putting in for large increases in other forms of spending, like the social and regional funds, and thus reduce the share of farm spending to something like two-thirds of the total.

Unfortunately, this meant increasing the total size of the Community budget to the point where it would be bumping up against the ceiling of the maximum financial resources which could be made available under existing rules. Under the text of financial stringency, at a time when most member governments are trying to control national public spending, the ministers have made big cuts in the Commission's proposals for increased non-farm spending. But the farm policy remains untouched, because the mechanisms of the policy make it impossible to control, or even forecast, its costs.

As we have seen, the end result is that there is a large positive flow of funds to rich farmers in rich countries, which is a denial of any aim of narrowing regional and national inequalities. Chancellor Helmut Schmidt takes the wastefulness of the CAP as an excuse for adopting a sceptical view of any Community spending, but his position is not strengthened by making cuts only in those chapters of the budget which might conceivably not be

How to control monopolies

THE TIME has come for the Government to reconsider its whole attitude to the nationalised industries' financing and pricing. The National Consumer Council was right to state yesterday that "the record of nationalised industry price rises over the past 12 months verges on the disastrous." Since coming to power, the Government has alternately pretended either that it has no direct influence on nationalised industry pricing, or, even more hilariously, that price increases in the public sector can somehow make a positive contribution to counter-inflation policy.

Pay round

The continuing inflationary pressure still being generated by industrialists and workers responding to the 26.3 per cent average increase in nationalised industry prices during the year to mid-August is the penalty for the Government's self-deception. If the nationalised industries had kept their price rises down to the general level of retail inflation over the past year, consumers might now be facing an inflation rate of less than 15 per cent, rather than the 16.3 per cent which union leaders will, in fact, be bearing to the bargaining tables as the pay round opens. For industry, the effects of nationalised industry price increases have been even more serious. Unlike value added tax, these prices affect industrial costs directly as well as through wage expectations. They have an immediate adverse impact on industrial competitiveness, which is matched by few other instruments of economic policy.

When it is not taking refuge in general reflections about non-intervention or the need to control public sector borrowing, the Government has one apparently rational riposte to such criticism: the justification lies in the need to put the state industries' finances on a sounder footing," to quote Mr John Biffen speaking recently on the radio.

However, it is simply untrue that the recent spate of price increases have had anything to do with "sound financing." On the contrary, several have in effect been imposed against the wishes of management, either as a response to new, more demanding financial targets as

wasteful and counter-productive.

In reality, however, the argument of financial stringency is only a hypocritical cover for the most cynical log-rolling between Germany and France in a pre-electoral period. The French President wants to leave enough headroom in the budget to be able to finance farm price increases which will strengthen his hand in next spring's presidential election, and the German Chancellor wants to give him a leg up.

Yet everybody knows that the common agricultural policy must be reformed. One of the sections in the French Planning Commission's survey of the next 20 years is headlined: "The Common Agricultural Policy will be renegotiated." If the budgetary ceiling is not reached in 1981, it will be reached in 1982: we are to suppose that the member Governments will then start cutting out all Community spending except the CAP?

Major interests

Naturally, the main beneficiaries of the CAP would like to postpone any consideration of reform for as long as possible, in the hope that then they could get away with minor tinkering at the margin. Such an outcome would be deeply unsatisfactory for the Community; in any case, it may well be impossible, since the prospective admission of Spain and Portugal to full membership in two or three years would, if the CAP remained unreformed, be bound to add substantially to the costs of the policy.

The British Government has a major interest in seeing the question of CAP reform come out into the open in the near future, since a radical reform is the only sure way of securing a permanent solution to the problem of the UK's excess contributions to the budget, as well as the only sure way of channelling Community expenditure into useful directions. At the same time, the UK has a unique asset in its energy resources which could be brought into play in parallel with negotiations on the CAP. Mrs. Thatcher was right not to discuss North Sea oil in return for a temporary budget bargain. But a radical reform of the CAP would be a much more valuable achievement, and one which would benefit the Community as a whole.

in the case of the gas and electricity industries, or because of the impossibility of meeting arbitrary external financing limits imposed by the Government in its attempts to reduce the Public Sector Borrowing Requirement.

There is nothing "sound" about requiring corporations in invulnerable monopoly positions to meet tougher financial targets at a time when the profitability of most other industries is plunging. Nor is it rational to force industries at the forefront of technological advance, such as British Telecom, to finance almost the whole of their expansion internally, by simultaneously raising prices and cutting investment programmes. British Rail, which was given a small concession last week through a £40m increase in its external financing limits could, with the right attitudes from management, unions and government, be another industry with a rapidly growing market.

Of course the attitudes of management and unions are the key to the headaches which all governments have suffered in their dealings with the nationalised industries. The main objection to letting the corporations borrow more heavily instead of raising prices is simply the suspicion that greater financial freedom would lead directly to higher wage increases and more inefficient operation. There is, however, little evidence to suggest that the very roundabout control exercised through external financing limits has had any effect on wage bargaining or efficiency.

Alternative

Only by combining price restrictions with strict financial limits can the Government hope to have a major impact on nationalised industries' pay bargaining. This would be tantamount to a pay policy for this part of the public sector and could well lead to the confrontations with powerful industrial groups which the Government has been studiously avoiding.

The alternative is to give the industries much greater financial freedom, provided their managements and workers prove capable of meeting reasonable medium-term targets for financial performance and efficiency.

EUROPE'S steel industry is once again in a state of crisis. Most of the leading companies are making heavy losses and the British Steel Corporation, Europe's largest producer, is among the worst hit and it is going to need yet more public money to keep going.

But its problems are by no means unique. The recession has bitten deep in Britain, but its effects have also been felt elsewhere on the Continent. Over production, over manning, and over capacity are major causes for concern in many European countries. And in Brussels where the EEC has been struggling for some time to create order in the industry, there is now a clear feeling that crucial decisions will have to be taken this autumn.

The prospect that the three-year-old Davignon plan, under which the EEC has sought to maintain voluntary price and production controls, might collapse has raised again the spectre of an all against all price war which many European steel-makers believe would be nothing short of disastrous.

Next Tuesday, Viscount Etienne Davignon, the EEC Industry Commissioner, will meet representatives of the 12 largest Community steel makers in a final effort to get agreement on further voluntary curbs.

If this fails it is a real possibility that mandatory controls will have to be imposed under the European Coal and Steel Community rules. (This aspect

of Europe's steel crisis will be the subject of a second article which will coincide with next week's meeting.)

BSC has been particularly badly affected by the slump in British car production, a long steel strike and the steady desertion of its products by its domestic consumers. These are the peculiarly British reasons for its current dire problems. But the group also serves as a symbol of what, in varying degrees, is affecting most European producers.

In these circumstances Sir Keith Joseph, the Industry Secretary, has accepted that BSC will not be able to keep within the Government's £450m cash limit this financial year, and is about to announce further financial assistance will be available. Sir Charles Villiers, Mr. MacGregor's predecessor, estimated in June that the shortfall would be around £400m but it could well be more.

It is similarly expected that BSC's losses in the current financial year will be at least as high as last year's £550m and liquid steel production—which last year reached 14.1m tonnes—could be little more than 10m tonnes. These projections for the current year are made worse when account is taken of the fact that BSC produced no steel at all during the final quarter of 1979-80 because of the strike, and some £200m of last year's losses were directly attributable to the dispute.

The strong pound, the level

ALAN PIKE analyses the troubles of the British steel industry which mirror those elsewhere in Europe but are more serious

of inflation and heavy increases in fuel costs have all caused the corporation severe problems as it has struggled for orders in a desperately weak market. In addition, leaders of both sides of the British steel industry accuse Continental manufacturers (who found the U.S. market all but closed to them during the anti-dumping suits issue) of diverting surplus steel to Britain.

The entry of such steel has been fuelled by the contacts which British suppliers and stockholders made with Continental suppliers during last winter's national steel strike.

In the immediate aftermath of the strike the level of import penetration was appalling for BSC. Imports in April reached a value of £206m—compared with a monthly average of £101m during 1979—and the level dropped only to £193m in May. While there has been a decline every month since then—by August the figure had dropped to £112m—other evidence suggests the British industry cannot merely regard increased imports as simply a

temporary aberration.

A survey conducted this month by Industrial Purchasing News suggested that 40 per cent of manufacturers and stockholders who responded to the inquiry were changing their steel suppliers—with 72 per cent of these companies intending to go overseas for at least some of the steel which they previously obtained in Britain.

Delivery and quality were mentioned among the reasons for this intended switch but the main factor was price. Companies feel that they are suffering a price disadvantage of at least 10 per cent by buying British.

Mr. Ian MacGregor, the new chairman of BSC, is acutely aware of this problem. While the problems of the pound and the recent concerted attack by foreign steel producers on the British market are major factors in the present troubles, the solution to them also involves further technological development by BSC—by far the most important of which is increasing the amount of steel which is produced by continuous casting—and yet again improv-

ing productivity.

These are among the factors which will appear in the wide ranging review of BSC's activities and future which Mr. MacGregor will present to the Government within the next month or two.

BSC deplores charges from some union sources that, in the face of the activities of other EEC producers its own export drive is not sufficiently aggressive, but it is determined that it will export only if there is a profit to be made. Nonetheless, the amount of steel exported by BSC has been in decline for the past two or three years and this trend will continue through 1980. In the April-July four months period BSC exported nearly 700,000 tonnes and this would suggest an annual figure of around 2m tonnes. But the April-July total is distorted by exports during the winter's strike and exports in the current financial year will fall below 2m—compared with 2.5m in 1979-80 and 2.9m in 1978-79.

Mr. MacGregor's efforts to bring the runaway finances of BSC under control focus upon another of the areas where BSC differs from the rest of the European steel industry—it has already gone through a rationalisation programme which has cost jobs at a rate which most competitors would consider quite remarkable. The present redundancy operation, which is nearing its end with the highly publicised demise of the Consett

works, will lead to the loss of about 52,000 jobs.

By comparison, the Spanish steel industry—which is expanding too much for the liking of a number of EEC steel-makers—has lost less than 1,000 workers during the past year, largely because of Government anxiety not to let job losses get in the way of its efforts to keep wage increases under control. In the French steel industry, where closures have provoked the sort of social unrest which has been threatened but not experienced—in Britain far fewer jobs have gone. There was a decline of 11,000 between 1978 and 1979, and 38,000 between 1974 and 1979.

The drastic cuts in BSC have come about because of the speed with which it has been forced to reassess its capacity needs. Sir Charles Villiers inherited an industry with a target capacity of 90m tonnes, and four years later, having been forced to reassess its capacity needs, he found it had to be cut to 50m tonnes. Mr. MacGregor, one who will be half this size.

In these circumstances the British Government's decision to increase BSC's subsidy constitutes an acknowledgment that there is no quick and simple solution to the present problems of the steel industry. And Mr. MacGregor, by wanting to delay his final proposals on the future shape and size of BSC for as long as possible, appears to agree with that.

This feature has been written with the assistance of FT correspondents in Europe.

HOW THE INDUSTRIES ARE ADAPTING



THE NETHERLANDS steel industry is in effect Hoogovens, one partner with German Hoesch in the Estel group. Planned production at its IJmuiden plant this year is 5m tonnes—maximum capacity is 7.5m tonnes. Planned expansion to 11m tonnes has been dropped because of the steel market. The company is convinced that Davignon-type measures must continue, believing that a free market would have "disastrous consequences" for the entire steel industry. Workforce dropped from 22,381 at the end of 1977 to 20,059 in late 1979.



WEST GERMAN steel companies are divided over the EEC's efforts to maintain and revise the Davignon measures. Dr. Herbert Gienow, chairman of Klockner, insists that any new agreement must include a special quota for his company to compensate for an artificially low output level fixed when the production levels on which the plan is based were set. This was before its Bremen plant had fully come on stream. But the company has been criticised for taking this position by Hoesch and other West

German producers and the squabbling led to Count Otto Lambsdorff, the Economics Minister, this week telling the companies to "get their house in order as soon as possible." Structural adjustment to flagging demand is continuing in the West German industry—20,000 jobs have been shed during the past two years, although there has been little compulsory redundancy, and the industry now employs 300,000.



ITALY'S steel industry problems are largely financial—publicly-owned Finisider—responsible for roughly half of national production—severely undercapitalised and forced into heavy bank borrowing. As a result, the Italian steel producers' association, earlier this month demanded urgent government action on restructuring, recapitalisation, import penetration and energy costs. The Italian industry fears that acceptance of Davignon reductions for the final quarter of the year will worsen import penetration.



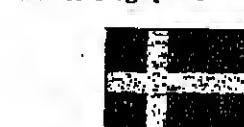
LUXEMBOURG steel giant Arbed has in recent years gained a reputation as a

skilled crisis manager through its plan to restructure itself back to health. This suffered a partial blow two months ago when it announced that the plan will be 50 per cent more expensive than originally thought—rather than LuxFr 23bn (about \$800m) originally considered necessary to finance the 1979-83 programme the bill will be nearer LuxFr 37bn. Luxembourg's largest company, with its debt burden already standing at over LuxFr 22bn, is looking to the Grand Duchy's government to finance the plan, which is vital if Arbed is to maintain its leading role in the EEC as a producer of long products.



FRENCH steel industry rationalisation will reduce theoretical capacity to between 23m and 29m tonnes in the early 1980s (effective capacity 24m-25m) against earlier projections of 33m. The French Government has spent an estimated FFr 20bn in the writing off of debts, redundancy payments, regional aid and similar support but the two major bulk steel producers, Usinor and Sacilor Sotavia, are still making heavy losses. A current reorganisation is expected to bring specialist steel producers, Ugine Sidel and Creusot Loire, into the orbit of the bulk manufac-

turers. This is part of an attempt to concentrate the industry on more elaborate products and the finishing end. Employment has dropped from 158,000 in 1974 to 131,000 in 1978 and 120,000 in 1979. About 11,000 more jobs are due to go by early 1981 under a 1978 restructuring plan.



SWEDEN'S steel industry is being restructured—present plans envisage a net fall in crude steel capacity from roughly 7m to 6m tonnes during the next two or three years. Svenskt Stål, the biggest producer, is closing down four of its eight blast-furnaces, reducing capacity to 2.5m tonnes. The Swedish industry, more than 30 per cent of whose crude steel output goes into special steels, has co-operated closely with Brussels over the Davignon programme. It negotiates annually with the EEC over the size of Swedish steel exports to the Common Market and Swedish prices have conformed to those in the EEC.



GREAT BRITAIN'S nationalised steel producer, the British Steel Corporation,

is the biggest single European manufacturer and arguably also the British Government's biggest single industrial problem. The Corporation lost a record £545m in the last financial year and current year's losses are likely to be as bad, or worse. An unparalleled rationalisation programme, involving £2,000 redundancy, is reaching this year's capacity to 15m liquid tonnes but actual output is expected to fall far short of this. The Government has instructed Mr. Ian MacGregor, BSC's new chairman, to produce a plan of action to stem the losses, but has accepted that it will have to provide additional short-term aid to the corporation. While BSC's difficulties have been aggravated by last winter's national strike, the summer's particular severe demand for steel in Britain and export penetration is also badly affecting the industry's private sector.



SPAIN'S STEEL industry employs 75,330 people, 45,000 are in three integrated producers—Ensidesa, Altos Hornos de Meditarranea (AHM) and Altos Hornos de Vizcaya (AHV). Steel has become a central issue in Spain's EEC negotiations with the Commission and several member states anxious to stop Spain increasing its

steel-making capacity with a new hot rolled mill complex. The present Spanish industry is based on long products. Its motor industry requires steel sheet facilities to reduce heavy dependence on imports.



BELGIUM has for a century of 10m people a disproportionately large steel industry with an annual capacity of almost 20m tonnes. It is therefore in especially acute crisis—the steel sector is now losing about \$1bn a year and sweeping restructuring plans costing FFr 600m have been delayed by political problems. A radical emergency proposal for dismantling the chief producer—Lige-based Cockerill which accounts for about 30 per cent of Belgium's 12m tonnes output—into separate sink-or-swim units has provoked a storm of protest.

NEB DISPOSALS

A table summarising investments which accompanied yesterday's article on the National Enterprises Board wrongly indicated that F. W. Elliott (Holdings), the long-established clock-makers, was in Receivership. In fact, F. W. Elliott took over the NEB's shareholding in Thwaites and Reed Ltd., another clock-maker, and is trading normally.

MEN AND MATTERS

Warsaw hails its hero

Lech Walesa, the 37-year-old Gdansk electrician who leapt from unemployed obscurity to international fame as the leader of Poland's new independent trade unions took Warsaw by storm on Wednesday.

Driving down from Gdansk in a battered but festooned with union slogans his first car was early morning mass followed by tactical discussions at the capital's Polish Intellectual Club. Just opposite the official trade union headquarters, the club dispenses hot black tea and advice to unionists from Mazowsza, the old name for the district around Warsaw.

Spiritually and intellectually hounded, Walesa and his train of delegates from the 17 district branches of the new union moved on to a hero's welcome at the grim court house. The normal course of justice ground to a halt as typists, clerks and judges alike leaned out of windows and jostled with the mob for a sight of the man of the moment.

Bedlam reigned in room 203 until tough union marshals imposed order by decreeing: "Delegates this side, journalists that side and judges in the middle." Depositing his union statutes with the three judges sitting across a green baize table, Walesa and his growing entourage streamed out of the room, almost sweeping away an astonished policeman walking downstairs with a downcast prisoner in handcuffs.

As supporters chanted his name and threw bunches of carnations Walesa was carried shoulder-high down the courtroom steps before beginning an impromptu one-mile march behind the union banner through gaping crowds to the Tomb of the Unknown Warrior in Victory Square. On then, two hours late, to a meeting with Deputy Prime Minister Mieczyslaw Jagielski.

Twice blessed, by Church and State, Walesa and company

swept off to the Ursus tractor plant, a stronghold of free trade union aspirations since the strikes and riots there in 1976. Hoarse and weary, Walesa rose to the cheers from more than 5,000 workers in the factory football stadium before sitting down with the crowds of journalists who had scurried in his wake all day.

Asked if he intended to co-operate with the official trade unions, he replied: "Yes, if they still exist. About 90 per cent of the workers seem to want to join our union. But we've had enough of unanimity," he smiled. "Perhaps somebody should give the official unions a subsidy to keep them going."

Blue murder

Chairing the annual meeting of electrical engineers Laurence Scott yesterday, chairman Paul Tapscott waxed eloquent in Carrollian style on the indignities being forced upon industry. Doubtless stirred by the new financial pressures on one of his other companies, Lesney, and the fact that even now Scott is besieged by blithering Mining Suppliers, he declared that industry was fast becoming a Mad Hatter's tea party.

"We must make ourselves more productive and more efficient," he said, acting the part of the host. "That means we must produce more, in less time, from capital we can not afford, to service customers without work, to buy with money they have not got and can not afford to borrow."

Changing voices, Tapscott continued: "Rubbish," yelled the blue queen, rushing along the M3 with her foot on the brake and her discarded corset jamming the accelerator. "Who needs industry?"

progress payments. "We could not afford to finance it for two years," he said, "and we turned them away. If things go on like this the Blue Queen will find she has killed part of industry."

"Oh yes," he replied to the obvious question, "I am a member of the Conservative Party. I paid up last week in fact."

Adams appeal

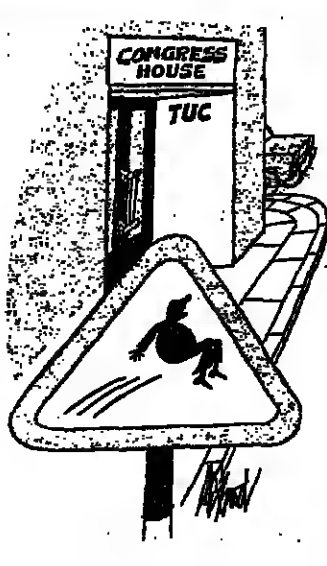
Six years ago, Stanley Adams became something of a European hero by supplying the EEC with evidence that Hoffman-La Roche, the Swiss chemicals and drugs company, was breaching Community competition laws.

After a long legal battle, the company—net annual profits about £20m—was fined £175,000. Adams, a Maltese-born former employee, paid a heavier price. He was convicted under Swiss secrecy laws of industrial espionage, sentenced to prison and banned from Swiss soil. His wife committed suicide while he was in detention and he has been living since, in some poverty, with his three young daughters in Italy.

Under persistent pressure, the EEC Commission earlier this year gave Adams a "barbary payment" of £25,000—a "derisory amount" according to his friends to set against his distress.

Now a group of sympathisers in London, including Tate and Lyle president John Lyle, Sir John Foster, chairman of Justice and former Tory MP, and Edward Holloway, director of the Economic Research Council, hope to clear Adams' debts and provide enough for him to begin a new life in Britain if Home Secretary William Whitelaw can be persuaded to allow him to settle here. Adams, a one-time British consul, lost his UK nationality when Malta became independent.

Meanwhile, the Socialist Group in the European Parliament is pushing the EEC Commission to re-open the Hoffman



case in the Swiss courts. Richard Caborn, Labour MEP for Sheffield, tells me: "We believe the Swiss action against Adams broke its trade agreement with the EEC and we intend to see that it does not happen again."

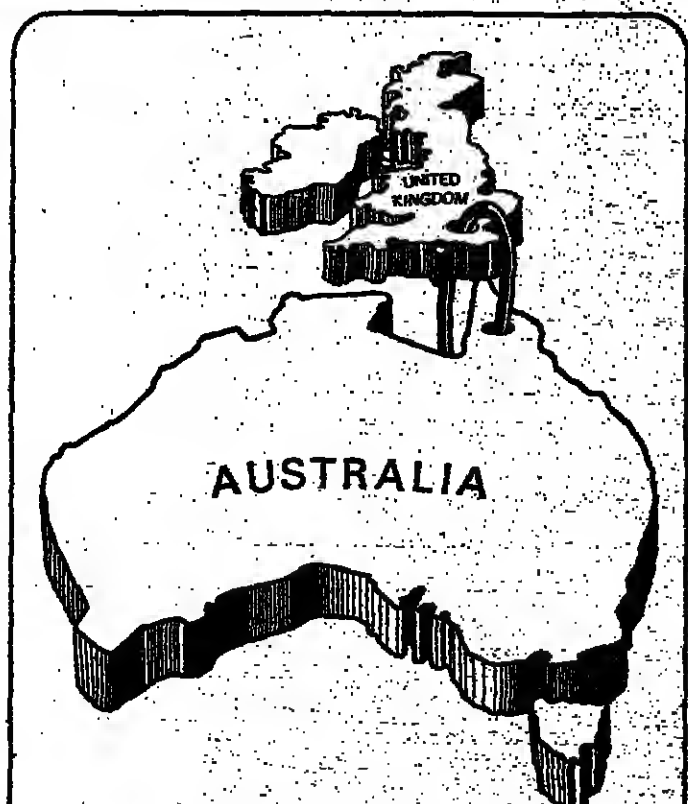
Forewarned

Martellous thing, hindsight, but I cannot have been the only one who shrugged on August 20 when news arrived from Iraq that the Government had increased by half interest-free loans to cautious citizens wanting to build air-raid shelters.

Magic

Overheard snatch of conversation between two executives of Singer and Friedlander, the merchant bank which is about to be sold to new owners: "You know, now I do believe in fairies at the bottom of the garden."

Observer



The vital link

Thinking about doing business 'Down Under'?

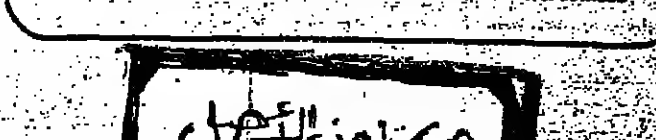
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FINANCIAL TIMES SURVEY

Friday September 26 1980

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Ford's World Car

Never before has a motor company had so much at stake on a new car as Ford with today's launch of the Erika. Different versions will be sold in various markets—but it arrives at a time when Ford desperately needs to revive its fortunes in the U.S.

Project that has to succeed

By Kenneth Gooding,
Motor Industry Correspondent

FORD'S front-wheel drive "world car," code-named Erika during its development, takes to the roads of Europe today bearing the Escort badge.

It was developed as part of a \$3bn (£1.2bn) project, the biggest the group has undertaken. And the Escort also has been described by Sir Terence Beckett, until recently chairman of Ford UK, as "the most important new car in Ford's history."

That was not dramatising the situation. Some observers believe that, should the "world car" fail, Ford will never fully recover from its present difficulties.

During the past five years the motor industry in the Western world has been deluged with problems from many directions. The motoring public is demanding cars with better fuel consumption but will not tolerate any sacrifice in safety. The industry is therefore having to invest huge sums to get the new breed of fuel-efficient vehicles to the market as quickly as possible.

Yet the same trend is switching present sales to smaller cars and away from the bigger ones which carry much healthier profit margins.

The Japanese had the capacity available to produce the right kind of cars to meet the boom in demand for smaller vehicles in the U.S. and Europe. They have therefore been able to strengthen their position in world markets and fix their prices at even more competitive levels than before.

This factor has helped put a brake on attempts by the Western manufacturers to improve the profitability of their small cars in their home markets or to fill their manufacturing capacity by exporting more to "neutral" markets.

The squeeze on oil supplies in the summer of 1979 created uncertainty among potential customers in the larger markets such as the U.S. and West Germany, a phenomenon which coincided with the normal downturn in the three or four-year cycle of demand for cars and turned it into a severe recession. In Europe this is likely to last throughout 1981.

As the world's third-largest producer of cars (2.04m last year compared with General Motors' 5.09m and Toyota's 2.11m) Ford could hardly expect to come through these pressures unscathed.

But, as bad luck would have it, the group is also suffering severe "image" problems in the U.S. and, to some extent, West Germany, the two major markets in the West. And "image" is very important when, like Ford, you are selling consumer products.

In the U.S. Ford has had two blows. The first concerned allegations that its small car, the Pinto, was prone to catching fire after a rear-end collision. A more recent allegation—strongly refuted—is that its automatic gearbox jumps from "park" to "reverse" in extreme and particular circumstances and this has caused injuries and deaths.

So, one way or another, Ford's losses are mounting at a faster pace than those of many of its rivals—and it must be stressed that most car manufacturers outside Japan are operating at a loss today.

Expectations are for a \$1.5bn loss in 1980 (against a \$1.17bn profit last year) and no return to profitability until the second quarter of 1981. To combat the effects the group has slashed investment to 1984 by \$2.5bn, possibly mortgaging the future to some extent, and \$1.5bn is being carved from annual operating costs.

Invest

In blunt terms, if the Erika project does not pay a reasonable return Ford would have to think seriously about its future because it would not have the funds to invest in a full range of cars for the 1980s. And it happens to be domiciled in a country where the Government does not automatically bail out companies in trouble, however big they might be.

Ford needs in particular to rebuild market share in the U.S., where it once had 30 per cent but has fallen since 1978 from 23 to 15 per cent, and in Germany—down from 12.3 to 9.5 per cent between January and April this year.

One element in the group's policy for tackling this challenge is already clear. Its pricing is pretty aggressive. For example, in the UK and Germany the new Escort, incorporating much up-to-date technology, and manufactured on the most modern plant, will cost only about 3 per cent more than the old model it replaces.

In the U.S. there have already been suggestions that the price is so low that Ford will be selling the new car at a

loss, at least initially.

However, it could be that Ford is simply passing on the benefits of "world car" production even though it has not taken the concept anywhere near as far as it might.

The "world car" approach is really to do with "world components." To many people the idea suggests the production of key components in vast numbers at huge plants to get the enormous economies of scale that should result. The components could then be distributed around the world to various car assembly plants and made into vehicles designed specifically to suit the local markets in which they will be sold.

However, Ford has re-written the description of the "world car" in a way—surprise, surprise—which fits the Erika perfectly. Ford says any definition today of a "world car" should include "the design, engineering and development of a product by international teams of technical talent inherent in a worldwide corporation."

The end result should be a car with a uniform engineering philosophy and sufficient commonality in component design to permit optimum use of the productive resources of the company.

Ford reckons that by pooling its worldwide effort it saved "up to \$150m on engineering, tool, facilities and launching costs." In terms of human resources the group saved 15,000 man-years—or the efforts of 5,000 engineers over the three years the Erika was in development.

Costly

Work on the Erika project started in 1977 when Ford in the U.S. gave up plans to develop its own small car and decided instead to use cars developed in

Europe.

But it soon found it would have been very costly to have forced its U.S. suppliers to provide components to European specifications.

Ford had already discovered the weak link in the "world car" concept. Many companies in many countries already have component production facilities. It would not be economic to duplicate their efforts even with vast plants. Ford found it was better to adapt the car than to face investment in new component facilities or force suppliers to make major changes at their plants.

Changing the car was possible because body design on the Erika was carried out in Dearborn in the U.S., Turin in Italy and Merkenich in Germany. Because both the European and U.S. versions did well in "consumer clinics" Ford decided to allow some styling variations between the two to satisfy the tastes of European and North American customers.

Ford does not intend to take the apparent opportunity to swap components between Europe and North America on a large scale. It seems to feel that it has gone far enough by setting up the highly complex supply network in Europe which has been operating successfully for some years.

So Europe will not be a major supplier of components to the U.S. models. In the U.S. 95 per cent of Erika components will be sourced from local suppliers.

The major element to the outstanding 5 per cent will be manual transaxles (front-wheel drive gearboxes), supplied from Japan by Toyo Kogyo.

Even though Ford expects that about 30 per cent of its UK customers for the Erika models will choose a manual version, it still reckons the volume involved does not warrant

investment in an American plant at a time when funds are in short supply. Neither will it take the manual transaxles used in the European Erika and which are identical with those used in the Fiesta and made in Bordeaux, France.

Erika models will be assembled at two U.S. plants, Wayne, Michigan and Metuchen, New Jersey, and sold in North America as either the Ford Escort or the Lincoln-Mercury Lynx.

They will be assembled in two European plants—Halewood in the UK and Saarlouis in West Germany. In Europe it will carry on the Escort name from the model it replaces.

Linked with these developments is a car to be made for Ford by the Japanese group Toyo Kogyo at Hiroshima. This will be assembled in several countries as well as Japan and sold in the Far East (but not Japan) and Australasia as the Ford Laser.

The connection between Toyo and Ford began because the U.S. group had seen for some time it could not expect to maintain market share in the Asia-Pacific area by sending out car kits from either Europe or the U.S. for local assembly in individual markets.

The Japanese industry, with its high productivity and low costs, would eventually swamp Ford, which would not be able to charge economic prices for its vehicles.

So Ford took the Erika engineering concept along to Toyo with which it already had links—Ford sells about 60,000 Toyo pickup trucks through its dealers, mainly in the U.S. The idea was for the Japanese company to develop a car from this concept using some input from Ford's Asia-Pacific division.

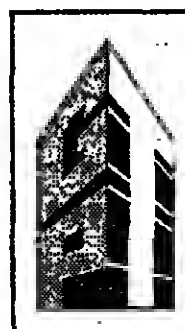
The outcome is the Mazda

CONTINUED ON NEXT PAGE

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FORD'S WORLD CAR II

Components network takes shape

M. BERNARD VERNIER, PALLET, president of Renault, said recently: "There are no world cars, only world components to be made on a vast scale."

That seems to be only partly true for Ford's new world car. The vehicles to be sold in the U.S., Europe and the Asia-Pacific area certainly will not look alike. They will be different because local tastes are different, as are the technical regulations for vehicles in each geographic area.

But neither will there be as many common components or assemblies as might have been expected if Ford had pushed the world car concept to the limit. Mr. Philip Caldwell, Ford's chairman, summed it up when he said: "There are more common brains in it (Erika) than common parts."

Even though the Ford engineers in Europe and the U.S. were working on the same concept, the cars they eventually designed have little in common. According to Ford, the engine basic parts are common — except for the emission control unit needed for the States. And the floor pan and running gear of the American Escort/Lynx could be fitted with European suspension parts.

However, in practice both areas — the U.S. and Europe — will be self-sufficient. In the U.S., for example, 95 per cent of the components for the Escort/Lynx will be provided by local suppliers.

The major part of the outstanding 5 per cent will be accounted for by the manual transaxles (gearboxes) from Ford's Japanese associate, Toyota. Ford estimates that around one third of the Escort/Lynx sold in the U.S. will have manual transmissions but that does not warrant the group setting up a plant of its own there. Toyota obviously won the contract because Japan is such a low-cost manufacturing area. In Europe manual transaxles — almost identical to those used in the Fiesta — will be supplied from Ford's wholly-owned plants at Bordeaux, Halewood

and Cologne.

One of the reasons Ford has not pushed the "world component" concept to the limit is that it can get the required economies of scale, so essential in the motor industry, in each of the individual markets of the U.S. and Europe.

A report by the UK Central Policy Review Staff — the "Think Tank" — some years ago covered this topic and suggested that the minimum efficient size for a manufacturing operation making identical castings for an engine block was an annual output of 100,000. For engine and transmission machining and assembly the figure was 500,000 and for final assembly 250,000.

Influenced

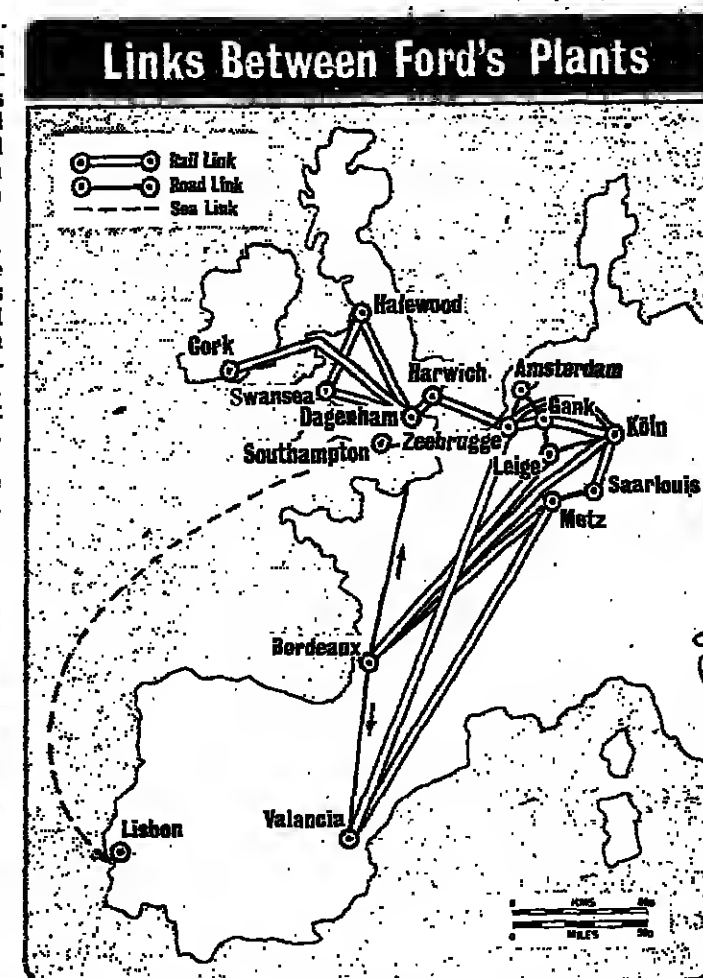
Ford can achieve these figures — or something very close — without having to resort to trans-Atlantic sourcing.

The local content statistics are also heavily influenced by the fact that Ford buys about 60 per cent of its components from outside suppliers and maintains that this will not change significantly for the Erika models.

The group has a tendency to flood its suppliers with a deluge of paperwork so as to ensure that components are continually made to a required standard. But this quality control process is handled mainly by middle managers, who prefer to deal with suppliers not too far from the assembly plant and who, literally, speak the same language.

Even so, components for the U.S. version of the Erika will be sourced in at least eight countries including Mexico (door-lift assembly), Brazil (rear brake assembly), Britain (steering gears, valves), France (clutch assembly), Spain (suspension struts), West Germany (bushings), Italy (fuel pumps, cylinder heads) and Japan (air pumps, wheel bearings, steering wheels, halfshafts and switch assemblies) as well as trans-axes.

The major item to make the



trans-Atlantic crossing from the States to Europe will be the automatic transmission when the automatic version of the European Escort is introduced in about a year's time.

This will be Ford's own automatic, made at Batavia, Ohio, which it claims is nearly as fuel-efficient as a manual gearbox.

Sourcing components from many suppliers and sending some of them half-way around the world is a highly complex operation, particularly if the car assembly plant wants to shoot finished vehicles off the lines at the rate of one a minute. It can be achieved only by computer control. Computers

make sure that the individual parts for an Escort ordered by a UK customer arrive at just the right time to be assembled at various stages on either the Halewood or Saarlouis production lines.

Ford has great faith in its ability to swing components backwards and forwards around Europe because it has now had some years' experience in doing just that. It was among the first companies to take the EEC concept at face value and deal with it as one common market. Over the years Ford has reduced the range of cars it makes for Europe and attempted to maximise the economies of scale.

It has been easier for the group to organise its operations to gain these benefits than for, say, B.L. or Renault, both State-owned companies, which are obliged to look first to employment and suppliers in their own countries.

Every working day Ford would hope to build around 7,500 cars and commercial vehicles in Europe as well as making enough components at its 25 manufacturing centres to cope with orders from the group's subsidiaries around the world.

For protection and ease of handling, components are packed into containers or closed rail wagons. In the UK, Belgium, and Germany there are special trains which carry only Ford components in closed wagons. Within the company these high-speed express links are known as "Bine Trains".

From the UK plants containerised components are taken to the port of Harwich on the East Coast and then shipped across the North Sea on a twice-daily ferry service to Zebruggen in Belgium and then by rail to the Ford plants in Belgium, West Germany and Spain.

Transmissions made in Bordeaux are moved to the UK and Spain by road, and to Belgium and Germany by rail. Exports to Ford companies outside Europe are by sea. Special "drop body" containers from the Cologne and Genk (Belgium) plants are transported by road to Liège where they are removed from the trucks and transferred on to rail wagons and then taken from Liège to Valencia by rail. From Saarlouis in Germany many "drop body" containers are moved by road to Metz and then by rail from Metz to Valencia. On the return trip, Fiesta engines and body panels travel by rail from Valencia to Metz, and then on to other plants by road.

Delivery from the plants in Britain to those in Belgium and

West Germany by the rail and sea service requires three days, and to Spain eight days. Delivery of transmissions from Bordeaux to other European plants is completed within 48 hours by the regular scheduled services.

Ford estimates that when car markets are in a more normal condition it has more than 1,500 containers, rail wagons and "drop body" containers in service in Europe and that there are more than 12,000 tonnes of components in transit between the plants.

Flexibility

The system obviously involves some calculated risks and when Ford decided to "Europeanise" in this way it must have built considerable flexibility into it. After all, it was Ford which led the industry into dual-sourcing to protect itself should an important supplier get into difficulties. Components, sub-assemblies and even complete cars can be supplied from more than one place or substituted by similar products made elsewhere.

Even so, there were times when economies of scale dictated that there could be only one plant. There is, for example, the Ford Antiole plant in Belgium, the sole supplier of car bumpers and some other equipment for the whole of Ford's European operations, including the new Escort.

What Ford has in balance in this complex supply chain is the cost benefits of producing components in economic quantities against the disadvantages of having so much "stock" in the long pipelines.

Perhaps the real test, as far as Ford is concerned, of whether or not the "world component" concept is valid will come with its next "world car," code-named "Toni," which in Europe will replace the Cortina and Taurus.

Kenneth Gooding

The car: its specifications and range of versions

WITH THE new Escort, Ford has endeavoured to produce a world car capable of meeting needs ranging from those of the European sports-car driver, to the driver restricted to 55 mph on the arrow-straight U.S. highways, to the Australian pounding across unmade roads in the hinterland.

Perhaps not surprisingly, the different versions that have emerged do not have as many components in common as first envisaged, even if there have been substantial savings on overall development costs when all markets are taken into account.

The U.S. Escort is nearly seven inches longer, wider, has different body panels and because of emissions legislation has poorer performance and higher fuel consumption than the European version. Beneath the skin, however, all models share the important new concept for Ford, of a front-wheel drive car with fully independent suspension.

European drivers are offered the car in three body styles—three-door and five-door hatchbacks, and an estate and three engines. These include 1.1, 1.3 and 1.6 litres, the last in two states of tuning.

For the UK and some other markets, the 1.1 litre engine, of 55 hp, is derived from the existing Fiesta overhead valve pushrod engine, while the larger units are the new CVH engines produced at Bridgend.

The CVH engines have outputs of 69 hp for the 1.3, and 79 hp and 96 hp for the 1.6 units.

As with the BL Mini, which started the front-wheel drive revolution, the engines are mounted transversely to increase passenger and boot room.

At 1,657 lbs, the Escort is almost as light as its class (the VW Golf weighs less at 1,633 lbs but is six inches shorter). With an aerodynamic drag coefficient of 0.335 (0.375 on the XR 3 sports model due in November), the new Escort offers 15 per cent less wind resistance than the old model. However, it would appear unable to match the claimed drag coefficient of 0.345 of its most "slippery" rival, Citroën's GSA hatchback.

The engine drives through a four-speed, all-synchromesh, two-shaft transmission developed from the Fiesta gearbox, but strengthened for the 1.3 and 1.6 litre models. It is mounted co-axially to the engine, and thus lacks the ultimate space-saving of the BL concept of putting the box beneath the engine. But it has the advantage of greater mechanical simplicity. An automatic transmission developed for the U.S. car is expected to be available later.

The Escort is fitted with the McPherson strut front suspension, pioneered at Ford, and a standard feature for many years. However, its geometry is entirely different from that of

its Fiesta relative, the latter's negative scrub radius geometry having been widely criticised for lack of feel. The Escort has nominally zero scrub radius to cut steering effort and wheel kickback over ridges. Ford claims that stability in a straight line in the event of one tyre deflating is improved.

The other advantage of the Escort's front drive assembly is the claimed elimination of torque-steering experienced as a "tugging" at the steering wheel under acceleration, as the front wheels fight to do their twin, simultaneous tasks of steering and driving.

Criticised

It is in the rear suspension that Ford has departed from all previous models, even the Fiesta. The latter was also criticised for the poor ride provided by its non-independent beam rear-axle. Ford has opted instead for a simple but apparently very effective three-link independent system in which almost-vertical damper struts, mounted outward on separate springs, are located by pressed transverse arms and longitudinal tie-bars. Apart from minimal camber changes, the system avoids making any major intrusion into cabin or load space.

One of the car's more novel aspects is the installation of an integrated circuit to monitor the car's functioning, the first

on a high volume model. It has been developed in such a way as to run automatic checks on its own validity. This eliminates the risk of false readings on, say, oil or coolant levels. It also provides warning of wiring faults and brake-pad wear.

The company has also come up with a better anti-theft system for the car. Ford claims that a police "thief" took 20 times longer to enter the car without the proper key than it took him to beat other security systems.

Other features of the car include electrically stabilised instruments and illuminated switches, which change colour between the on and off positions. As usual with Ford, the range is split into a number of different models offering varying grades of equipment and trim. There are basic 1.1 and 1.3 litre versions in all body configurations, slightly better-equipped "L" versions, covering all three engines except the 96 hp 1.6 litre unit, various 1.3 and 1.6 litre GL models, and the top-of-the-range Ghia versions. The 96 hp unit is reserved exclusively for the XR 3 high-performance car, to be sold from November.

A longish list of options includes electric window-lifters, central door-locking, electrically operated radio aerial and tilt-or-slide glass sunroof.

John Griffiths

Project CONTINUED FROM PREVIOUS PAGE

Familia, to be known in Europe at the 323 and in the U.S. as the GLC. This car will be sold through Mazda networks.

The same car, with a few relatively minor changes to its front and rear panels and a Ford engine, will be made by Toyota for Ford either in built-up form or in kits for shipment to Ford assembly plants in the region. Australia will certainly have an assembly plant.

The Ford Laser will go on sale early next month, starting in Hong Kong and Singapore. The aim was to give Ford's dealer network in 35 Asia-Pacific countries—the doorstep of the highly-efficient Japanese industry—a price-competitive car in a market segment Ford believes is vital.

Ironically, however, Ford will be helping to strengthen the Japanese car industry—which it sees as its major threat in the future. Toyota's output will be pushed well above the vital 100,000-a-year level because of the link with Ford, giving Japan not two, but three major producers.

But to cement its relationship with Toyota, Ford last September acquired a 25 per cent shareholding in the Japanese group for \$55m.

Ford has also developed a new engine to be used in most of the Erika models and these

are being made at the Dearborn engine plant in the U.S. and at Bridgend in Wales. There could be another engine plant in Australia.

The two existing engine plants ultimately will have the capacity to produce 1.2m units a year.

There is also a new automatic transmission which Ford has developed and claims can nearly match the standard of manual transmissions on the fuel consumption front. This will be made at Batavia, Ohio.

The American plants should turn out 550,000 Escort-Lynxes in the first full year—roughly 20 per cent of Ford's North American total. The European plants expect to achieve production of between 400,000 and 450,000—split roughly equally between the UK and West Germany—representing 32 per cent of Ford's output in Europe.

Potential

By the end of the second year the U.S. capacity should be up to an annual 1m. The potential in Europe is probably the same. In Europe, where Ford spent \$1.1bn of the total, the Escort will compete with rivals such as the Volkswagen Golf, the Opel (or General Motors) Kadette, the Fiat Ritmo/Strada and the

Talbot Horizon. It will also challenge such Japanese imports as the Datsun Sunny, the Toyota Corolla and the Honda Accord—and, of course the Mazda 323.

The Escort will be launched simultaneously in all the major European markets except for Spain and Portugal, where local import controls provide effective barriers.

In Europe Ford has built up a launch stock of about 20,000 cars at its 5,000 dealers; the network includes 1,900 in West Germany, 1,220 in Britain and 700 in France.

The Escort in Europe will offer three body styles—three and five-door hatchbacks versions plus an estate car—and three choices of engine capacity: 1,100 cc, 1,300 cc and 1,600 cc.

In some markets, including the UK, Norway, Denmark and Ireland, the 1,100 cc engine used will be a version of the Fiesta unit made in Valencia, Spain.

The Fiesta engine is cheaper than the Bridgend one partly because it does not have an aluminium cylinder head. Ford can therefore lower the price for the bottom-of-the-range Escort in Britain for the fleet buyers who are the predominant purchasers of this type of model.

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FORD'S WORLD CAR III

The new Escort and its main rivals in Europe. (Old Escort's sales last year: 217,200).



From the left, the Renault 14 (1979 European sales 136,000), Talbot Horizon (206,900) and Fiat Ritmo/Strada (288,600)

From left to right, Alfa Romeo Alfardo (82,800), Opel Kadette/Astra (289,600) and Volkswagen Golf (475,700)

ROAD IMPRESSIONS OF THE NEW CARS

Lively performance and mechanical refinement

IF A SINGLE word had to be used to summarise the new Escort's appeal, it is refinement. All four versions I drove last week from the 13-model line-up were as mechanically refined as any of their competitors, considerably more so than some.

The 1600GL 5-door I started with comes near the top of the price range at £4,518. Its engine and transmission were quiet that when driving on a billy, winding road, it was easy to forget whether one was in third gear or fourth.

Only at high speeds in the 1600GL was it good for 35 mph in first, 55 mph in second and an efficient 50 mph in third—there was a significant booming from the new overhead camshaft 1.6 litre engine. At more sensible speeds, it was as quiet as an executive car of twice its price. On the motorway, cruising at 70 mph, the radio was still easy to listen to without turning up the volume from its town driving level.

The lack of noise from the transmission was particularly impressive. Gear whine can be a problem in front-drive, cross-engined cars but the Escort's gearbox and final drive were virtually noiseless, even when suddenly accelerating and decelerating in quick succession.

Pick up in high gear from low speeds was brisk and smooth and the performance generally felt more than adequate for a 1.6 litre, five-seater with ample luggage space. So, for the engine/transmission package, the marks must be Alpha-plus.

The steering, too, was excellent. It was reasonably light at low speeds, with an adequate lock, and silky precise when driving fast. Like all front-drive cars, the Escort understeers.

That is to say it has to be held into a corner to overcome its desire to go straight on and maintain a good line on a windy motorway or when passing speeding juggernauts.

Roadholding

Unlike some of its competitors, it never understeers to excess. Gunned at far above average speeds, it rolls hardly at all and it is not necessary to put on more and more lock to get round. When tyre adhesion finally goes, the rear slides very gently outwards. People who indulge in motor sporting fantasies especially when driving alone, will not be disappointed by the Escort.

The one aspect of the new car that failed to match expectations was its ride. Ford has chosen a sophisticated all-independent suspension system. It is neither disagreeably firm nor over-soft. Yet it allows some sharp vertical movement to develop in the important 30 mph to 50 mph speed range on less than perfectly surfaced roads. Unfortunately, the seat springing seems to aggravate matters.

Curiously enough, the Escort

behaves very well indeed on really rough roads. I drove down one potholed and broken gravel-track at between 40 mph and 45 mph without making the suspension touch bottom. Later I rode as a rear passenger over a similar road with equal satisfaction.

Ford has a history of not quite getting its rear suspension right with new models. The first Granada was awful but the latest ones are fine. Both the old Escort and the current Cortina provide at best an indifferent rear seat ride. No doubt the Escort will improve over the years.

I found the Escort 1600GL five-door hatchback's driving position extremely comfortable, with the right relationship between seat, wheel and pedals. The gearshift is slick and sweet, the clutch light, the brakes powerful and progressive. Instruments are clearly visible through the four-spoked steering wheel (but why a clock with hands, not electronic digits, I wonder?) and the steering column controls for lights, indicators, wipers and so on are ideally placed.

The trim, in dark, ribbed cloth, had a sombre elegance, relieved by the light, pouring through the glass sunroof. This can be tilted at the back or wound fully open and, should the sun be too bright, a shade can be pulled forward, as in the Honda Prelude.

It is an easy car to enter and leave. The doors are of a good

size and open wide. Once in, headroom is generous for the front seats, much less so for those in the back. But, even with the driving seat set well back to suit my long legs, I could still sit comfortably behind it. There are not many cars of the Escort's size of which I could say the same.

Moving down the range a little, I next tried the 1300L three-door. This has the new overhead camshaft engine, though of smaller capacity. The difference in performance was not all that marked though one might notice it more four or five up, with a full load of luggage. The interior looked a little less grand than the 1600GL's but the check seats

were every bit as comfortable. The front seat headrests were still hollow in the middle but there was no central console, with its useful cubbyhole for a tape recorder or cassettes.

The smaller engine was not quite as willing to pull hard from 20 mph in top gear but the car was as refined and well-balanced as the 1600. Speeds in the gears were lower, too, though the 1300 still comfortably exceeded 70 mph in third. For £3,865 I would have expected a trip setting on the mileage recorder. The fresh air ventilation, aided by a fan at lower speeds, was effective. On the motorway, the 1300 cruised as happily and was as

quiet as the larger-engined Escort.

Next, I moved still further down to a 1100L. This has almost the same engine as the Ford Fiesta. The transmission was as refined as ever though the engine was less self-effacing. The ride was no different in the 1100L than it had been in the far-costlier 1600GL, but I found the deficiencies more acceptable. After all, what one takes exception to in a £4,500-plus car seems understandable in one costing almost £1,000 less.

There was more road noise in the 1100L than in the up-market models, which had shown a notable lack of tyre

thump, but it was still perfectly satisfactory. The car felt a little lighter and less solid than the 1300 and 1600, presumably because not so much sound damping material is used, but the noise level generally was good and, like all the cars I drove, there was no wind roar to complain about.

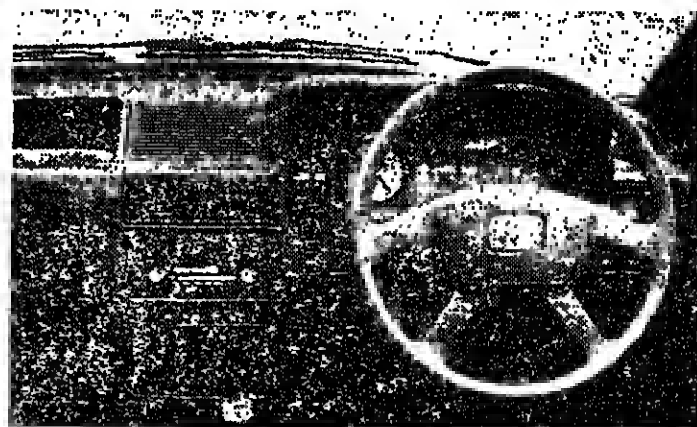
Finally, I tried the 1100 Escort three-door, the most basic model of the whole range. The bright red paintwork contrasted cheerfully with the black seats and carpets the colour of regulation grey flannel trousers. It was a functional though not spartan interior. Even though the central vents had been eliminated, enough fresh-air came in to allow the windows

to stay shut on a warm day. Ford seems to have made considerable economies in sound absorbing materials to keep the base model's price down to £2,374. There was quite a lot of rumbling and booming when driving over secondary roads, for example. I thought this Escort had more in common with the base model Fiesta than it had with its better-equipped larger-engined and, of course, far more expensive up-market relative, the Escort 1600GL. I had driven earlier in the day. But, those ride problems excepted, I rate the Escorts an outstanding addition to the current crop of family hatchbacks.

Stuart Marshall



Good road-holding precise steering and quiet transmission mark the Escort GL. ... inside the Ghia, head- and leg-room are surprisingly generous



Design needs to appeal to fleet managers

SIR TERENCE BECKETT looks back on the Cortina as perhaps his biggest single contribution to Ford UK, chairmanship of which he has changed for the director-general's seat at the Confederation of British Industry.

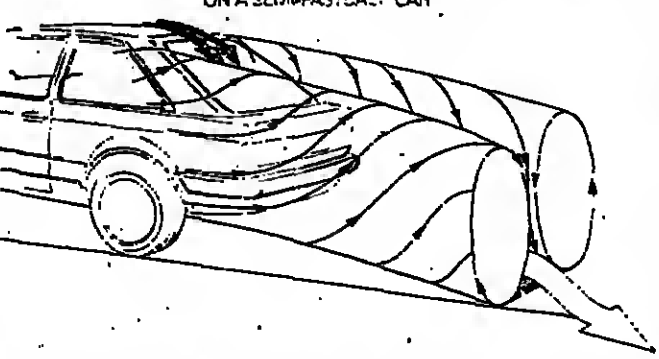
The Cortina concept, of a roomy but cheap conventional saloon, has stood Ford in very good stead since its launch at the start of the 1960s, well ahead of similar rivals. Not only was it cheap to make—and still is—because of its simple front engine/rear drive specification, fleet managers were also convinced in their thousands that this same simplicity meant cheaper operating costs than complex front-wheel-drive cars. The Escort—until now a smaller Cortina with the same simplicity—has scored almost the same degree of success, with nearly half its sales in the fleet market.

With the launch today of the new Escort, Ford has the task of convincing fleet managers that this roomier, lighter front-wheel-drive version will be considerably cheaper to run than the old one. The new Escort is not Ford's first front-wheel-drive car, of course. But the small Fiesta hatchback, launched in 1976, has been sold mainly in the private market where the buyer, though equally cost-conscious, is likely to give the car he has bought with his own hard-earned cash far less of a pressing than it would get from the company rep.

Clearly, with a car on which Ford has staked so much—it quotes alliteratively, if not quite accurately, five years' development by 5,000 engineers, at a cost of £500m for the car and £500m for the engines—it is essential that the fleet managers be convinced, at least until such time as the Cortina and all its immediate rivals go fad and most will have done by 24 years' time) and the managers be left with no choice.

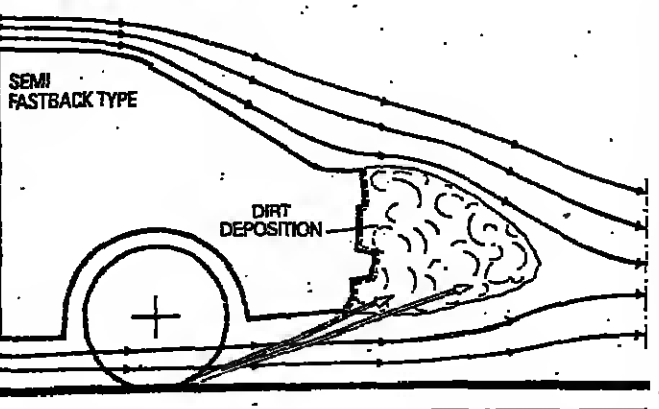
Ford is using what on paper looks like some strong cost-of-ownership arguments. It claims that over 50,000 miles, the most frequent fleet replacement mileage, the new Escort is about one-fifth less expensive to maintain than its nearest rival.

SCHEMATIC ILLUSTRATION OF TRAILING VORTICES ON A SEMI-FASTBACK CAR



Work on the airflow round the car has resulted in a cleaner rear window and less drag from trailing vortices

TYPICAL WAKE FLOW



a year over 50,000 miles on the 1100cc model and about 2.3 hours a year on the 1300cc and 1,600cc models fitted with the new, Bridgend-produced, CVH engines described elsewhere in this survey.

The most immediately striking aspect of the car, however, is that although it is a hatchback, it does not look like one. Since Ford had resisted the forward hatchback trend longer than most, it was faced with a considerable problem: it wanted an aerodynamically efficient car—which the hatchback is—without looking like just another VW Golf, Renault 5, etc. On the other hand, the "three-box" approach, which offered the best prospect for individuality, meant the loss of hatchback versatility and inferior aerodynamics.

The compromise result was what Ford calls the "hustle"—the bobbed tail which turns the Escort into a hatchback, fastback and notchback rolled into one.

Adoption of the shape allowed Ford to meet its requirement for an aerodynamic drag coefficient of below 0.4, obtain its individuality and—almost as a bonus—largely eliminate one of the more irritating problems with hatchbacks, grime thrown on to the rear window.

The problem with most hatchbacks is how to persuade air to flow cleanly down and away from the rear window without creating drag and grime-provoking turbulence. With the new Escort, the hustle is claimed to confine turbulence below the back window. In addition Ford claims that the two spiral trails of turbulence formed behind all cars and caused by air streams from the roof and sides meeting have been persuaded to turn inwards on each other, making the area of turbulent wake smaller than that of the car, so reducing drag further.

The result is a drag coefficient for the standard Escort of 0.385, and 0.375 for the high per-

formance XR3 version, which goes on sale in November. This is 15 per cent better than the old Escort, and Ford claims that a 10 per cent improvement in drag produces an average 3.5 per cent improvement in miles per gallon.

The figures are helped by the front grille design, which first appeared on the Cortina, in which at higher speeds air is diverted from the engine bay over the car, an important factor since, according to Ford, air drag through the engine bay can account for up to 15 per cent of the total.

At 156.3 ins overall length, the new Escort is fractionally shorter than the replaced model, but well over 200 pounds lighter, with a kerb weight for the 1,100 cc version of 1,687 lbs. The saving has been achieved by extensive use of computer body stress analysis, made possible by the linking at the end of 1978 of the engineering centres at Merkenich in Germany and Duxton in the UK with Ford's central Cyber 176 computer in Dearborn.

Weight-saving was a priority in the Escort's design, being a major factor in improved economy particularly during acceleration. The Cyber computer allowed Ford to build a computer model of the body with 3,200 "components" to simulate the body and what would happen to it under stress.

The result—42 prototypes later—was a final shell in which pressings down to 0.8mm for low-stress areas have allowed Ford to get within about 5 lbs of the original target weight and still pass impact tests with ease. A considerable amount of weight was also saved by the adoption of 3mm, rather than 4mm, glass.

All these factors are reflected in the performance figures of the cars, which show significant improvements over the old Escort versions. The new 1100 Escort is claimed to achieve 49.5 miles per gallon at a constant 56 mph; 36.2 mpg at a constant 75 mph and 34.9 mpg in urban driving.

The improvement is perhaps best illustrated, however, by the comparative performance of the old and new "sports" models. The "old" 2-litre RS200 was credited with a top speed of 108 mph with 0-80 acceleration of 8.5 seconds from an engine developing 110 bhp. Its replacement, the XR3, has 1.6 litres, "only" 98 bhp, yet has identical acceleration and a higher top speed of 113 mph.

John Griffiths

INGERSOLL

The Ingersoll Milling Machine Company extends its congratulations to the Ford Motor Company on its successful launching of the new Escort

Ingersoll is particularly proud to have made a major contribution by supplying the transfer line system now in production at the Bridgend plant to machine the engine blocks for the new Escort project.

This line is a successor to the engine block machining system supplied to Ford/Spain for the very successful Fiesta car, and represents the continuation of Ingersoll's contribution to international and European manufacture of internal combustion engines. Transfer machines totaling more than five hundred machining stations have been furnished to the European industry since 1945.

Nearly once every week for the next two years, Ingersoll will ship transfer line machinery to plants all around the world to manufacture new design gas and diesel engine blocks. This is a direct response to the growing worldwide need for high quality, more fuel-efficient engines.

Never before has the challenge been greater: design and material changes are coming faster; quality requirements getting tougher; product life cycles shorter; worldwide competition keener;

cost considerations stronger.

Ingersoll is responding with new ideas, new machines and tools, and new and improved methods of manufacturing. To do this, Ingersoll is deeply involved in the development and application of new technologies to improve the processing of all sizes and types of engines in low, medium, and high volume production. The Ingersoll microprocessor-controlled AC servo drives to control all machining motions represent one of the technological innovations being used in new generation Ingersoll manufacturing systems.

Using dynamic simulation by computer models, alternative systems are compared. Production rates are identified as affected by cycle rates, grouping of machining stations, banking capacity of automation, metal cutting rates and tool change frequencies, manpower and maintenance schedules. Such planning achieves operating efficiencies higher than those traditionally associated with these systems.

May we share with you, as we did with Ford, the responsibility of meeting tomorrow's challenges?

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U.S.A.
The Ingersoll Milling Machine Company
707 Fulton Avenue
Rockford, Illinois 61101
Rockford (815) 987-6000
Telex: 257-427 (INGERSOLL RKD)

Simple is efficient.



The new Ford Escort.

مكتبة النجف

The car illustrated is an Escort Ghia, fitted with optional metallic paint, headlamp wash, rear wash/wipe, central locking, power front windows, stereo radio and stereo cassette and power door.

Anatomy of an efficient car

The new Ford Escort is a spacious front wheel drive hatchback with a transverse engine and all independent suspension.

It can carry five people in comfort. With the biggest engine it can do over 44 mpg at 56 mph. And with the smallest engine it achieves over 90 mph*.

Service intervals are 12,000 miles with an interim service at 6,000 miles. It's designed to be one of the cheapest cars to service in its class.

And the body is protected by a 20 stage anti-corrosion programme.

How have we achieved such remarkable efficiency? In engineering, simple is efficient. So we've kept the engineering in the new Escort as simple and straightforward as possible.

Engineers call it looking for the elegant solution. It takes sophisticated technology to find it.

Here then, step by step, is the story of the new Ford Escort. Simply one of the most efficient cars you can buy.

Transverse engine and front wheel drive makes more space for people.

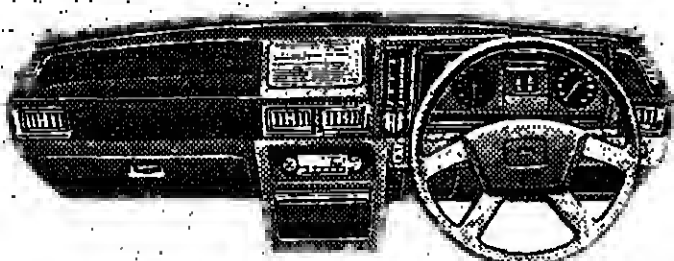
The simplest way to enlarge the passenger space without enlarging the car is to make the engine space smaller.

So, based on a wealth of experience with the Fiesta, we've mounted the engine sideways and given it front wheel drive.

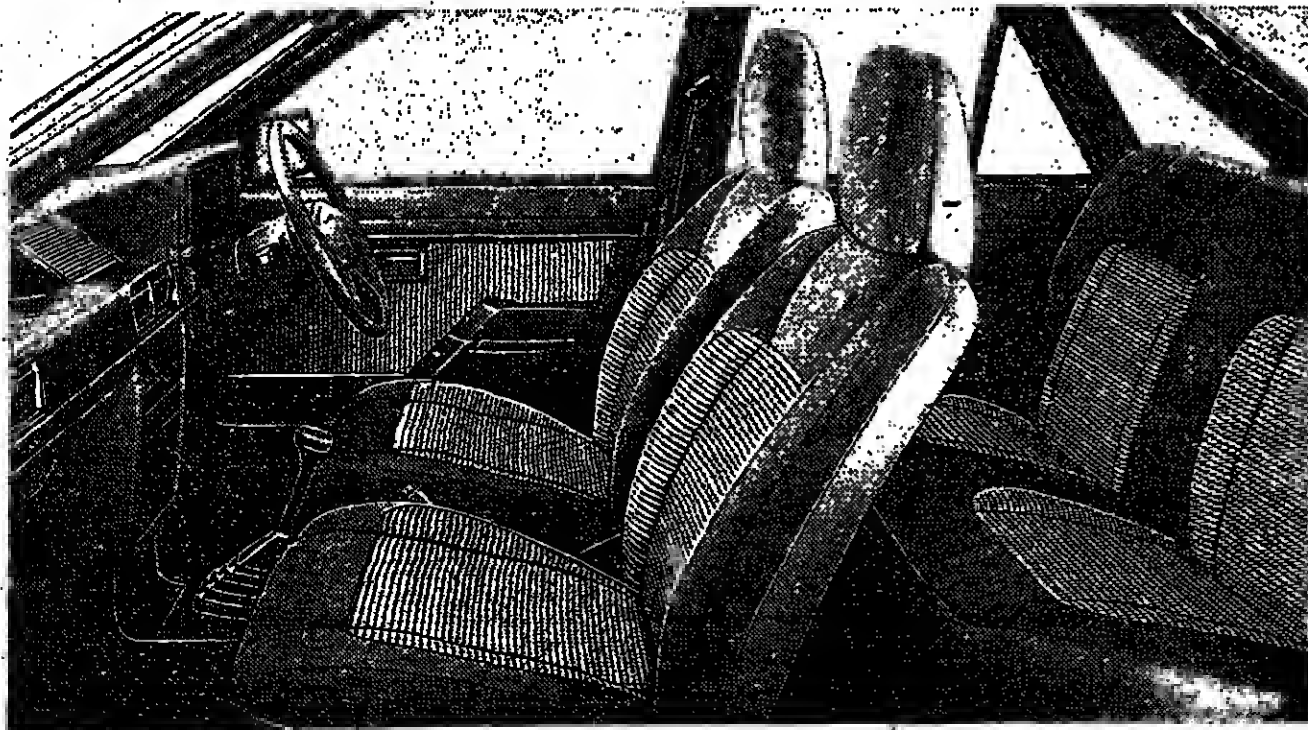
This eliminates the transmission tunnel and the rear axle differential, thus leaving more room for you and your luggage. Incidentally it also saves weight and improves traction.

The Escort's seats have coil springs tuned to the car's suspension and they're deeply contoured to give comfortable support and reduce fatigue.

Among the more luxurious equipment you can order in the new Escort Ghia are electric front windows, stereo radio/tape player with electric aerial, central door locking, tinted glass and headlamp washers.



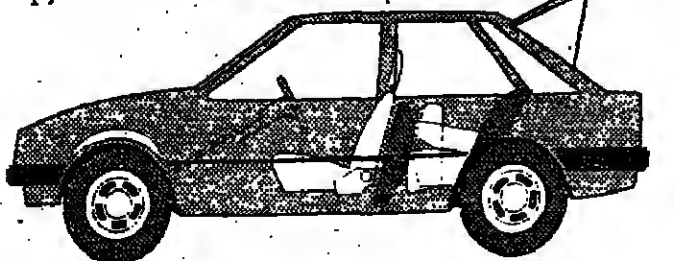
As a safety check Ghia and GL instruments include warning lights for low oil, water, windscreen washers, brake fluid and even front brake pad wear.



Interior of Escort Ghia. Standard features include remote control driver and passenger door mirrors, a digital clock with date and stop watch functions and a screened glass sun roof that either tilts or slides.

The hatchback that thinks it has a boot

The Escort has a new kind of hatchback. At first glance it looks as if there is a conventional boot. But the tailgate actually opens all the way up to the top of the back window, giving access to 20.3 cu. ft. of space with the seat up, 48.7 cu. ft. when it is folded.



For security, on the Escort L and above there is a removable shelf which hides your valuables.

Up to 47 mpg. Up to 104 mph from ultra efficient new engines*

Drawing on the experience of ten years with the previous Escort, Ford have designed entirely new 1.3 and 1.6 litre engines with aluminium cylinder heads.

1 Ultra efficient new transversely mounted engines give remarkable performance and economy.

2 Latest technology applied to anti corrosion treatment.

3 Front wheel drive for good traction, road holding and directional stability.

4 Rack and pinion steering - accurate, precise and responsive.

5 Large glass area with laminated windscreen and slim window pillars gives panoramic visibility. Tinted glass optional.

6 Optional screened glass sun roof (standard on Ghia) tilts or slides and also features an interior sunblind.

7 A new kind of hatchback.

Part hatchback, part boot.

8 Integral tailgate.

spoiler reduces drag.

9 Tailgate wiper.

(optional).

10 Heated rear window,

on L and above.

11 Optional electric front

windows on Ghia.

12 Folding rear seat gives

flexible luggage space.

13 All independent suspension

with coil springs all round.

14 Quietness is engineered

into the car with special

engine stiffening ribs and

extensive sound deadening.

15 Clutch and many other mechanical parts

are self-adjusting to save servicing.

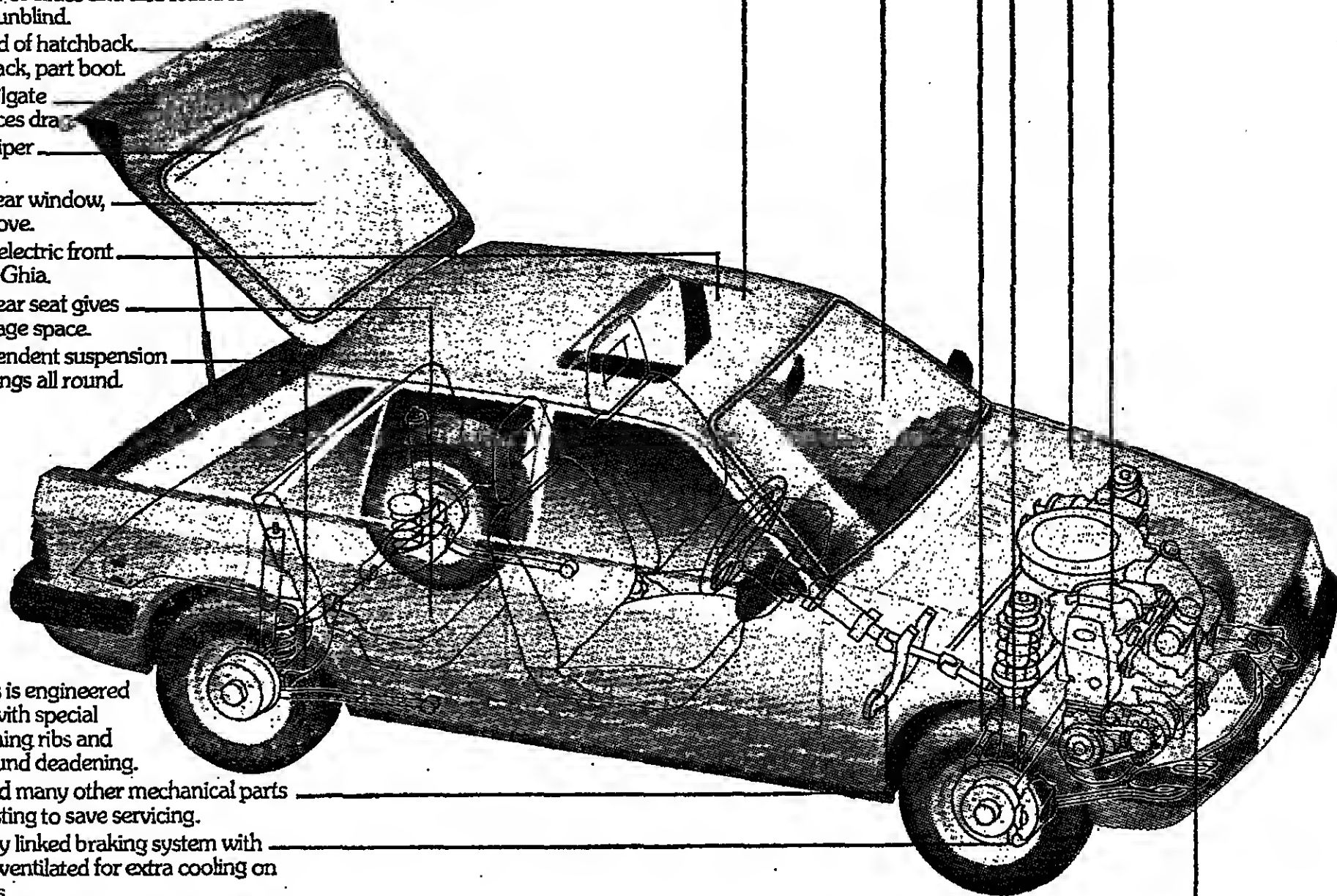
16 Diagonally linked braking system with

front discs - ventilated for extra cooling on

faster models.

17 Gearbox is separate from engine for easy

maintenance.



12,000 miles between major services

The new Escort has so many self-adjusting and maintenance free features that it almost services itself. These features mean that it can go 12,000 miles between major services with only an interim service at 6,000 miles.

In fact, based on studies comparing routine servicing costs with competitive cars, Ford estimate that the new Escort will be cheaper to service than most of its rivals.

Here's why: 1 Self-adjusting clutch. 2 Self-adjusting brakes. 3 Self-adjusting tappets and breakerless ignition (on 1.3 and 1.6 engines). 4 Maintenance free wheel bearings. 5 Lubricated-for-life suspension, steering and door hinges. 6 Brake wear checking without removing wheels. 7 Centrally located fuses and relays. 8 Exterior bulbs replaced without tools. 9 See-through brake and clutch fluid containers. 10 Extended interval battery topping-up.

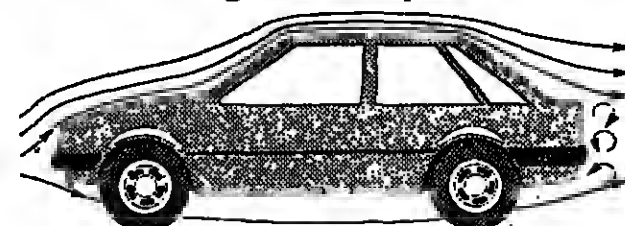
Latest technology applied to rust prevention

This is how we help keep rust at bay: After zinc phosphate anti-corrosion treatment, the body is given two coats of primer, then three coats of tough enamel paint are baked on. Window surrounds are made of aluminium which cannot rust. And the bonnet is made of zinc plated steel. Rust traps are designed out of the body. Box sections and door bottoms are protected by wax injection. Lower body panels are painted with a chip protection primer. And wheel arches and vulnerable underbody areas are treated with chip resistant PVC coating. The remaining underbody area gets a tough wax anti-corrosion sealant to protect against salt.

Styling used to be an art. Today at Ford it's a science

We call it "air flow management," the science of controlling the flow of air over, around and under the car. Thanks to efficient "air flow management" the new Escort emerged

from the wind tunnel with a drag coefficient of only 0.385, the most efficient in its class. At 70 mph as much as 70% of a car's energy can be wasted simply overcoming wind resistance, so streamlined design contributes significantly towards reducing fuel consumption.



1 Integral tailgate spoiler reduces drag, and the whole rear end design creates an actively managed area of turbulence that keeps spray and dirt off the back window whilst driving. 2 Front spoiler improves directional stability. 3 Aerodynamic radiator grille channels air over bonnet at high speed.

All independent suspension takes the rough smoothly

The new Escort's suspension is all independent, with coil springs all round. It not only gives a smoother, more comfortable ride, but also makes for sure, more predictable road-holding and handling. And there's a diagonally linked braking system with front discs, so that even if one circuit fails you can still stop on the straight and narrow.



See the new Ford Escorts at your Ford dealers now. And test drive an efficient car.

Range and Prices Escort 1.1 litre from £3374, Escort L 1.1 litre from £3695, Escort GL 1.3 litre from £4211, Escort Ghia from £4726. Maximum prices as at 26th Sept. 1980. Seat belts, car tax and VAT included. Delivery and number plates at extra cost.

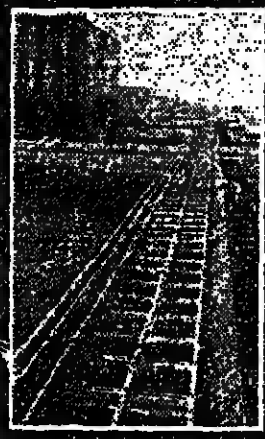
Government fuel consumption test figures			Top speed (mph)
	Constant 56 mph (90 km/h) (mpg)	(litres/100km)	
1.1 HC	49.6	5.7	90.1
1.3 HC	47.1	6.0	97.6
1.6 HC (IV)	44.1	6.4	103.8
Simulated urban cycle			Ford's computered figures
1.1 HC	34.9 mpg (8.1 litres/100 km)	36.2 mpg (7.8 litres/100 km)	
1.3 HC	30.4 mpg (9.3 litres/100 km)	32.7 mpg (7.7 litres/100 km)	
1.6 HC	26.7 mpg (10.2 litres/100 km)	28.4 mpg (8.2 litres/100 km)	

FORD ESCORT



BICC

The main 11kV electricity distribution in the new Ford Engine Plant at Bridgend is carried by NEW TECHNOLOGY cables manufactured at the Wrexham factory of BICC Power Cables Limited.



These XLPE insulated cables are installed on the roof of the manufacturing building and were chosen for their low weight, power ratio and economy when compared to conventional paper insulated lead covered cables.

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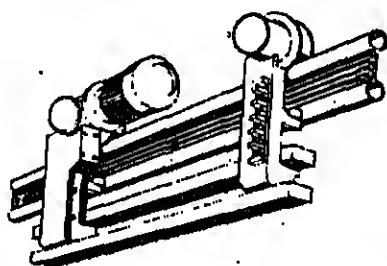
congratulates the
Ford Motor Co. Ltd. on the
Launch of their New ESCORT.

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Success to the new Ford Escort

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another step together in advanced engineering

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Companies in the worldwide Haden Carrier Group have a 30 year record of service to Ford, spanning five continents.

This list of the more recent involvement of Group companies in Ford development projects around the world exemplifies our proud record.

Works completed in 1980 for the new Ford Escort project by Haden Young at the Bridgend Engine Plant and by Carrier Engineering/Drysas King Conveyors at Halewood Body & Assembly Plant extend the role of successful projects still further.

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MORE THAN SIXTY OPERATING CENTRES IN TWELVE COUNTRIES AROUND THE WORLD.

FORD'S WORLD CAR VI

UK market share nearing 30 per cent

FORD IN BRITAIN

Plants	1978	1979
HALEWOOD (Escort assembly, transmissions etc.)		
BASILDON (agricultural tractors; engine, radiator, suspension and axle parts)		
BELFAST (carburettors and distributors)		
BRIDGEND (CVH engines)		
CROYDON (small stampings)		
DAGENHAM (Cortina and Fiesta assembly, Engines etc.)		
ENFIELD (instrument clusters, etc.)		
LANGLEY (commercial vehicle assembly, etc.)		
LEAMINGTON (engine, brake, transmission parts)		
SOUTHAMPTON (Transit assembly)		
SWANSEA (axles, brakes, gearboxes)		
TREFOREST (spark plug insulators)		
WOOLWICH (engine and transmission parts)		
Sales	£2,363bn	£3,193bn
Taxable profits	£242m	£347m
Output: cars	324,407	398,684
Output: commercials	106,472	167,232
Employees (year end)	63,000	75,000

According to the Department of Industry in an announcement made in December 1978 Ford was expected to invest £1bn in Britain in the subsequent four years, including £600m on the Erika project. The UK Government was to contribute nearly £150m by way of £75m in interest relief grants under the 1972 Industry Act's selective regional incentives and £75m automatic regional development grants paid in assisted areas.

reliability plus—perhaps the most vital element—relatively low depreciation compared with most other makes.

Ford showed its dealers how to keep the "residual value" of its cars at a reasonable level by the way it dealt with its own used cars—as you can imagine Ford itself uses many company cars and has one of the biggest "disposal" problems. Ford takes great care to keep track of the cars it has to sell and we must note that not too many of similar type and specification reach the secondhand market at one time to create a glut.

It persuaded its dealers that they should encourage the fleet buyers to spread their purchases across six to nine months of the year instead of buying all their requirements in one lump towards the beginning.

This meant that when cars were bought, not too many came back to the dealer at once and often he was able to dispose of them through his own fore-

court rather than send large numbers off to auction where the prices they fetched were not so high.

Ford also encouraged its dealers to persuade fleet customers to change their cars more often. Instead of holding on to a car for three years, by which time the mileage and depreciation were very high, fleet managers were encouraged to turn the cars in after two years, or even one year, for much higher "residuals".

So Ford's dealer network played a great part in the rise and rise of the group in Britain. Ford UK's director of car sales, Mr. Ernie Thompson, says: "We have to pay tribute to our dealers. They put in the investment so that they were able to sell and service twice the number of cars last year as they handled five years before."

Mr. Thompson predicts that, given that the old Escort captured between 7 and 8 per cent of UK total new car sales,

the new model should reach 9 or even 10 per cent.

The old Escort's best year was 1976 when Ford changed the Cortina and the supply shortages which usually accompany such changes allowed the Escort into first place in the British market with a 10.4 per cent share. Last year the Escort got a respectable 7.7 per cent.

And in the first eight months of this year the old model won 7.3 per cent, far ahead of its rivals in what Ford calls the "C" class cars. For example, the Vauxhall Chevette achieved a 3.2 per cent share in the January-August period; this year, the Austin Allegro 2.6 per cent followed by two Datsuns, the Sunny, 2.3 per cent and the Cherry, 2.2 per cent.

In all, "C" class cars accounted for 30.6 per cent of the UK market over the first eight months of 1980.

Mr. Thompson expects the market segment to grow to around one third of total sales, helped on its way by the new Escort.

The major question about the new Escort's arrival—and the major marketing challenge for Ford UK—is how many buyers will substitute an Escort for another Ford they would have bought?

Mr. Thompson reckons that the Escort will take a little—but not much—from Fiesta by this "cannibalisation" process. Much more vulnerable is the Cortina which, in spite of last year's "facelift", is becoming a little long in the tooth by modern car standards. It appeals to many fleet buyers because it has the traditional "three box" shape, including a boot at the back which companies still seem to prefer.

Then perhaps Ford made a marketing mistake by carrying on the Escort name—with the new model. In most company hierarchies the Escort has been the "downmarket" car compared with the Cortina. These people, entitled to a Cortina because of their status within the corporate ranks, might be reluctant to accept a new Escort, however good it turns out to be.

The fleet market is also notoriously conservative and many buyers will adopt a "wait and see" policy about Ford's new Escort because it has from the past had often provided servicing problems. When the engine is driving the rear wheels of a car the manufacturer does not have to put so much metal under the bonnet. And the machinery is less complex with rear-wheel-drive.

However, the Fiesta, which was Ford's first front-wheel-drive car, has proved reliable and not particularly difficult to service.

Ford never meant Fiesta to be a fleet car and in 1977 only 7 per cent of Fiestas sold in the UK went to corporations. This year, though, the percentage is up to 25 per cent so that a good number of fleet managers who now have Fiestas and whose doubts about front-wheel-drive have been allayed.

Suggestions

Also, Ford involved a number of fleet buyers very early in the development of the new Escort and they returned again and again to make their contributions and suggestions.

Mr. Thompson maintains that the new Escort gives the company access to a much wider variety of potential private buyers than the old one. For example, the XR3 sports version to be introduced in November will cover a wider market area than the old Escort RS ever could.

And the wider choice of optional extras for the new Escort—such as power windows, sun roofs with shades and 800-watt stereo—should attract buyers away from some imported models of those people who for fuel economy reasons are moving down from the "CD" or family-sized cars but only because they can have the same amount of room and interior comfort.

Mr. Thompson says that if Ford gets its marketing right it could have two cars each with 10 per cent of Britain's new car market next year. But he expects that the Cortina will just keep its place as the best-selling car in Britain.

K.G.

Halewood aims to improve productivity

FORD HAS spent £207m, one of the company's biggest European investment projects, at its Halewood plant on Merseyside, often the problem child in the group's European family. Of the total, about £130m was directly associated with the Erika project.

Halewood started life 17 years ago making the Anglia and until recently has been turning out the old-style Escort as its sole vehicle.

It was to be assumed that the plant would be given the job of producing the Escort's successor but the fact that the U.S. Board should have given the go-ahead to the investment programme—and recently to have authorised a further £130m to be spent by 1985—suggests it is giving

more weight to recent indications of a change of mood among the Merseyside workforce rather than the chequered past history of disputes and low productivity.

It is certainly true that the British Government is fairly generous with investment tax allowances and that Britain's tax structure is particularly kind to corporations which are profitable. But Ford has a lot at stake with the new Escort and if the car is anything like as successful as the group hopes, Halewood will have to perform well both as far as continuity of production and quality are concerned.

Halewood will be sharing with its sister plant, Saarlouis in Germany, assembly of three-door and five-door versions of the new Escort in its basic L and GL forms. It will also be the main supplier of estate versions and the only plant where the new Escort van, due for introduction early next year, will be produced.

Thanks to the new Escort, the Halewood assembly plant stands out among its neighbours, every one of which is on short-time working—including Ford's Halewood transmission manufacturing plant next door.

However, Mr. Arthur Rothwell, a local man who has been 17 years working his way up the ladder at Halewood to become general manager, has made a number of important points in recent discussions with the workforce.

First, Ford cannot be a "god-father" to Merseyside and invent extra jobs to cut the local 15 per cent unemployment rate—rising to a hideous 35 per cent in Speke where the plant is located—in an area where other companies are announcing redundancies with sickening regularity.

Protect

Secondly, he has told employees that the huge investment does not even protect existing job numbers. As further modern technology is introduced to the body and assembly plants the numbers of people needed will go down. And Mr. Rothwell has made the point bluntly that productivity must improve at least to the best European standards and that Halewood must achieve the engineering standards Ford has set itself for the Escort—and the unions have already committed themselves to this.

One of the changes made by Mr. Rothwell and his team was in the way information was disseminated to the employees. Information used to be passed down through various layers of management and the message was put across only as well as each individual passing it on was able to communicate it. And communication skills vary tremendously from one man to the next.

Mr. Rothwell and his management team now talk directly in the shopfloor and other em-

ployees. They are brought together in groups of 300, not an ideal number but necessary because 11,000 are employed at the Halewood body and assembly plants.

This process has ensured that all employees were given full information about the introduction of the new Escort as the decisions were made. "They might not have liked everything we intended to do, but they did not get any nasty, sudden surprises when we did them."

The meetings were designed to enable the employees to ask questions and provide the management with some feedback on the proposals.

Benefit

One major incidental benefit has already been felt. It involves the 22 press lines in Halewood's press shop. Six of the new presses are 1,000 tonnes, supplied by Vickers from a Schuler design, and costing £1m each. Between them the press lines help produce 110,000 panels a day—297 different types of panel not only for Halewood but also for Ford plants at Southampton, Dagenham, Cologne, Saarlouis and Genk. The Halewood press shop will be using 500 to 600 tonnes of steel each day.

At one of the briefing sessions, the man whose task it will be to collect the scrap which accumulates under the presses, claimed to a somewhat disbelieving management that he had thought of a better way to do the job. He was able, quickly to prove his point when they went down the lines and his suggestion will be followed.

Mr. Rothwell says that Ford put "quality of product" at the top of the list of priorities when considering what new technology to bring to Halewood and what other changes to make for the Erika.

Improvements in productivity and other benefits followed naturally.

For example, Ford has at Halewood more robots than BL at Longbridge, 39 compared with 30, but is not taking this type of automation so far along the body assembly process. (By the way, Ford does not refer to the machines as "robots" but calls them UTDS—for "universal transfer devices".)

Ford maintains that where there is flat welding to be done it is cost-effective to do it by conventional methods. It wanted, however, to automate the welding of those areas where complex shapes and structures were involved—like slide panels, the underbody and engine compartment.

Previously these welding jobs were carried out with the aid of a carousel which moved the metal past welders, each one working from one particular place alongside. The equipment was expensive to maintain and it was difficult to achieve continuous accuracy. One way of overcoming that

problem was to "over-engineer" the car involved—the old Escort—and consequently it had areas where there was more metal than really was required. The introduction of UTDS has not only enabled men to be shifted to other parts of the plant, it has also enabled the new Escort to be built to tighter tolerances, using less metal. And less metal means less weight. Less weight should mean more miles per gallon for the customers.

Of Halewood's 39 UTDS, 36 are used in "body-in-white" operations including three for standby and training purposes. They include 28 Nimak machines (£45,000 each), 11 Kuka robots (£75,000 each) and two made by Unimate (£35,000 each).

By January the expectation is that output of new Escorts at Halewood will be getting up to the capacity level of 1,015 a day, representing an annual rate of 235,000, more than the plant has ever achieved before. The best was nearly 1,000 a day. But the new Escort is an easier car to work on than the old one as it makes its way around the six miles of trim lines.

K.G.



Robots—or "universal transfer devices"—play an important part in the assembly of the new Escort at Ford's Halewood plant

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FORD'S WORLD CAR VII

Output of CVH engines builds up at Bridgend

BICYCLES HAVE turned out to be the quickest way of getting round inside Ford's new engine plant at Bridgend, South Wales. A massive development by any standard, the covered floor space alone extends to 27 acres, sufficient ground to accommodate 20 Rugby pitches. Surveying the quietly humming banks of sophisticated machinery and equipment stretching into the distance, it is difficult to grasp that only three years ago there was nothing to see on the site but green meadows and grazing cattle.

Yet today, with the paintwork barely dry, Ford's £230m Welsh plant (£180m capital assets, £50m working capital) is already in business. So far it has produced 1,000 test engines which have been subjected to exhaustive trials, including 320,000 miles of high-speed test driving by the plant's own employees and 30,000 saleable units for this month's launch. It is now building up smoothly towards the target output of 513,000 units a year of the new light-weight compound valve head (CVH) engines—of 1,100, 1,300 and 1,600 cc—which are destined to power Ford's new model range in more than 120 countries.

The major disappointment is that the plant may never provide the 2,500 jobs promised when the project was first announced—a figure which was the basis for a massive public cash injection. Not less than £145m of the total cost was put up by the Government—£73m in regional development grant and £72m in selective financial assistance under Section seven of the Industry Act.

Dampers struts

But the manning projection was made before Ford discovered that Japan has an engine plant of similar capacity with a workforce of only some 800. Bridgend is certainly among the most efficient motor manufacturing plants in Europe, but by Japanese standards it still has some way to go.

The company insists the employment total at Bridgend will ultimately be decided by sales of the new Escort range, but it has already identified areas in the plant where further automation could be introduced. Meanwhile there seems little danger of Ford being asked for a refund by the Government. Its defence is that the selective financial assistance was based on £10,000 per job created or protected, not just at Bridgend but also at Halewood, Belfast and Swansea.

Enthusiasm for the new design

COMPOUND valve-angles are not new—not are hemispherical combustion chambers. They are nevertheless features that Ford has chosen to single out for emphasis in naming their new Escort engine the CVH.

It would be wrong to suppose that they were scraping any of their technology or publicity barrels for the engine is packed with features that are new to Ford, or new to this class of cars, or at least admirably up-to-date; and in view of the intended production of more than 1m of these engines a year, Ford and its customers may share a justifiable enthusiasm for what appears to be a fine piece of design.

Apart from one or two questionable trivia, there is only one cause for disappointment: Ford has described as hemispherical a combustion chamber that is patently nothing of the sort. If it were, it would need a very different engine underneath it to exploit the many theoretical advantages of such a chamber. As it is, the engine has been developed around a combustion shape that is part-spherical, rather like a plano-convex lens, and all the evidence suggests that by taking great pains to avoid undesirable curvatures of this shape (by valve pockets, for instance) Ford have contrived to make the engine burn its fuel cleanly, completely, and with altogether respectable efficiency.

The geometrical complexities of the valve gear (necessary to avoid those pockets, and to avert fatigue or misbehaviour through over-stressing of the mechanism) need not undergo analysis here. Twin overhead camshafts would have done the job just as well, and nobody impressed by Italian or Japanese practice is obliged to accept Ford's declaration that such an arrangement would have been too expensive and

The signs are, too, that the spin-off benefit for the local economy is not as great as might have been hoped for, simply because Bridgend is totally plugged into the Ford infrastructure. The rough-cast engine blocks are brought in by rail from Dagenham and the cylinder heads from six separate sources, most of them on the Continent. The completed engines are then sent by rail twice a day to Halewood and Saarlouis in West Germany. One recent circulation suggested a further 700 jobs may be the sum total of the additional employment generated by Ford's Bridgend presence—not a large increment compared with many other industries.

For Wales, Ford's Bridgend plant represented the investment catch of the 1970s. It was won against exceptionally stiff European competition—thanks, among other incentives, to the then recently established Welsh Development Agency. The WDA was able to move quickly to assemble a site large enough (in all it stretches to 189 acres) to the right place from the standpoint of road and rail communications (close to the M4 and a mainline rail link) and with an infrastructure to enable Ford to make an immediate start on construction.

Time is money and Ford was in a hurry. The first bulldozers actually moved on to the site on the morning of November 15, 1977, little more than two months after the site was selected. The first Ford employees arrived for work in October, 1978, and were initially housed in portable cabins. In some instances machinery was being installed and commissioned before the spot was on. The first saleable engine emerged from the plant on May 19 last—the target date announced publicly by Sir Terry Beckett, the Ford's chairman, more than two years previously. Even by the company's own exacting standards this was "some going," as one Ford executive put it.

Ford began the operation by first putting together an international management team steeped in the company's ways of doing things and with direct experience of their allotted tasks at other Ford plants. Mr. Hugo Hof, the plant manager, is a West German who formerly headed the company's Spanish plant in Valencia. His deputy, Mr. Roy Godier, is English and held a similar post at the Dagenham engine plant. Another German, a Spaniard, three Irishmen, and a Welshman were also included in the

initial launch team.

But apart from some engineering supervisors' jobs which were filled mainly from other parts of Ford UK, the company determined to make Bridgend a truly Welsh plant by recruiting the rest of the workforce locally. Indeed Ford is very sensitive to suggestions that it has brought in a lot of outsiders. Of the 1,500 personnel now working at Bridgend (scheduled to rise to 1,800 by Christmas) it insists that no more than 100 have been brought in. Men recruited locally as production workers, without any previous experience of the motor industry, have already been promoted to supervisory jobs.

Training

But this commitment towards ensuring Bridgend is a genuine Welsh plant involved a massive training operation, beyond the professional resources of the company alone. Recruitment into Ford's own apprentice school at its Swansea axle and transmission plant was doubled. But it also sought the backing of the Government's retraining "skill centres" and Ebbw Vale College of Education to upgrade skills of locally recruited craftsmen and provide training in hydraulics, pneumatics and electronics. More recently, Bridgend College of Technology has begun running courses for supervisors at the plant.

Mr. David Murphy, the industrial relations manager, is fulsome in his praise for the tremendous support given not only by these institutions but also by the Manpower Service Commission's job centres in processing what turned out to be over 24,000 applications for employment at the new plant. In an area with more than its fair share of older and declining industries, the prospect of long-term job security offered by Ford was a major attraction. Indeed the management staff have been staggered at the number of their employees who at some stage in their working lives have been declared redundant.

Once on the payroll, some 200 of the workforce also spent four weeks at Valencia learning modern engine production techniques and even working for a time on the assembly line. Maintenance engineers were sent all over Europe and to the U.S. to work with the suppliers of the plant's machinery and equipment to master its intricacies. Over 300 items of machinery, some of them very advanced

technically, have been installed, accounting for around £100m of the overall cost.

But apart from the training effort Ford has subsequently worked consciously to involve employees in the success of the venture. A lot of time has been spent on briefing, to explain exactly what is happening, and on consultations about changes, production workers have been given the opportunity to assemble an engine by hand so that they can see for themselves their particular contribution to the finished product.

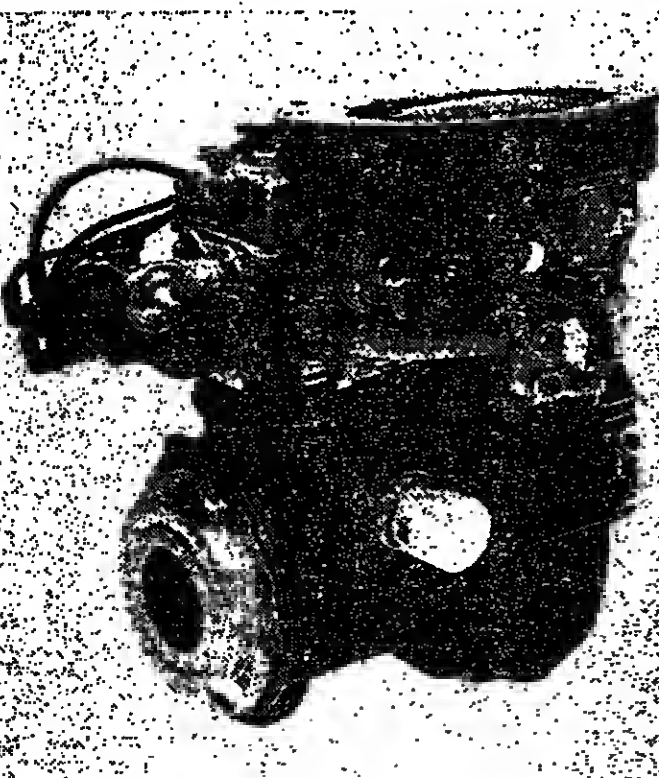
Even more significant, the plant has adopted Japanese-style quality circles—"regular meetings of groups of employees in particular sections to discuss how specific problems can be overcome and quality improved. The theory is that a man who spends eight hours a day doing a particular job is better placed to spot possible improvements than so-called experts. And the local management has been delighted at the extent to which Bridgend's quality circles have already come up with very constructive improvements which often require little money to implement.

But the dividends are not limited to quality alone. Quality circles also provide an education in engineering, contribute towards a sense of team spirit and understanding in the plant and have a beneficial effect on industrial relations generally. Workers feel they are being treated as intelligent human beings and react accordingly. The participation rate at Bridgend—and quality circles have been established right across the plant—is around 80 per cent.

In short, Ford is very pleased at the way its ambitious Bridgend project has got off the ground. At no stage has it run into major difficulties and tremendous effort and enthusiasm are being shown by the workforce, who travel from all over South Wales to work at the plant. But senior managers stress that goal judgement must be held back until the plant is running at full volume.

Wales too has every reason to be delighted. During a time of severe economic difficulties, arising notably from the run-down of the industry, the successful execution of the project and the way the workforce has adapted so quickly to the demands of a modern industrial plant have confirmed that Wales is entitled to a place in the first division when it comes to winning international manufacturing investment.

Robin Reeves



Exceptional reliability is one of the features aimed at by the new engine's designers

tronic ignition system, which might be taken for granted in a modern engine were it not that a miserable old-fashioned Kettering distributor system survives in the low-compression 1100 cc version.

This is one of five variants being made. Two are of 1600 cc displacement, one of these having different timing and carburation to give it the 98 bhp performance that should electrify the sporting XRS version of the Escort. A 1500 cc version giving 88 bhp (10 less than the milder of the 1600s) will probably emerge as the staple all-rounder, but for the mean of spirit or rigidity of pulse there are a couple of 1100s, one giving 59 bhp and the other a lacklustre 56 from low-grade fuel. The low compression ratio of this most pusillanimous of the CVH range allows it to operate on the 88 octane fifth which masquerades as petrol in some parts of the world (the others all burn 96 octane stuff), and is not to be criticised when one remembers that the new Escort is conceived as a new car.

This is why the annual churn-out of 1m CVH engines will occupy a factory at Dearborn in the U.S. as well as the new one at Bridgend in South Wales.

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FORD'S WORLD CAR VIII

German market share needs boost

FORD IS sorely in need of a boost in the West German car market to help revive its sagging market share. The success of the new Escort is of vital importance if the company is to remain a significant force in Western Europe's largest market place.

The launch of the Escort has been long overdue, for Ford has seen its presence in this segment of the car market almost disappear with the old Escort holding on to only 2 per cent of new registrations in this category in the first six months.

Ford's problems have been compounded in West Germany because this is the area of the market that has shown the strongest resistance to the general sharp fall in demand for new cars over the last 12 months. Total new car registrations fell by 11 per cent in the first seven months of 1980 compared with the corresponding period last year, but during this time the share of the market taken by models with which the new Escort will be competing increased substantially from 26.7 per cent in the first six months of 1979 to 31.3 per cent in the first half of 1980.

Ford faces a tough fight, too, to establish itself again in this market, which is dominated by two other very successful German cars, Volkswagen's Golf and the Opel Kadett. The competition also includes a wide variety of imported cars ranging from Fiat's Ritmo, the Renault 14 and the Talbot Horizon to a clutch of Japanese rivals such as the Nissan Sunny, the Honda Accord and Prelude, the Mitsubishi Colt and the Toyota Corolla.

Sudden shift

Without an attractive model in this class Ford has been badly placed to cope with the sudden shift in demand from the larger cars of 2 litres capacity and above to smaller, more economical models.

As a result, Ford's overall share of an already shrinking car market dropped in the first six months of 1980 to 10.7 per cent compared with 12.4 per cent in the corresponding period last year. The figures hide the fact that the full line of Ford's larger models, particularly the Granada and Capri, which had previously been among its best profit-earners,



Ford's Saarlouis plant is the third largest industrial undertaking in the Saarland region, employing over 8,000 people

Sales of the Granada, for instance, fell by more than 50 per cent in the first six months of this year compared with the same period of 1979, while sales of the Capri were down by 41.2 per cent. While the total car market in the Federal Republic shrank by 12.4 per cent in the first six months, Ford's total registrations in West Germany were down by 24.6 per cent.

The decline in demand has had direct consequences for Ford's work force. Last month the company announced that it was planning to cut its labour force in Germany by 6,000 through a programme of early retirement and voluntary redundancies. Extensive programmes of short-time working at its Cologne factories that the company had been implementing since last October were not sufficient to cope with the big fall in demand.

A total of 5,800 jobs are being cut from the 28,000 at Ford's Cologne-Niehl plant—the sole manufacturing location for Granadas and Capris for the whole European market—and a further 200 jobs are being lost at Ford's components plant at Düren, between Cologne and Aachen. The total redundancy programme is expected to cost Ford up to DM 135m (£31.4m) with production workers being offered a termination payment of DM 8,000-DM 12,000 (£1,960-£2,790).

Until the Escort could be launched the one bright spot in Ford's performance had been the Fiesta, its smallest model, which is the top seller in its

range with a market share in the first six months in this category of 28.9 per cent. Sales of the Fiesta have been limited partly by the lack of sufficient production capacity, however, because Ford is in the process of moving the assembly lines north from its plants at Saarlouis in south-western Germany to Cologne.

Imports

Space at Saarlouis is at a premium because this is the site of the production lines for the new Escort, and in addition Ford is hoping to mitigate the loss of work-places in Cologne by transferring the Fiesta assembly work to the city.

The bottleneck in Fiesta production caused by the move has been eased by the rapid buildup of imports of Fiestas from Ford's Spanish plants. About 24,730 Spanish Fiestas were imported in the first seven months of the year against only 16,070 in the same period of 1979, but total Fiesta sales have still fallen in Germany slightly to 80,920 compared with 81,540 in the first seven months of 1979.

With the Fiesta Ford tasted its first success with the concept of a "world car," and the company clearly needs a similar breakthrough with the Escort if it is to re-capture lost ground.

The launch of the new Escort inevitably has led in recent weeks to a slackening of activity in car showrooms throughout Germany, as potential buyers in this class wait to size up Ford's new arrival against the com-

petition. "Every model launch inevitably makes the market uneasy," said one leading Opel dealer, "and we always get a quiet period of three to four weeks."

According to another Opel dealer: "The chances are not bad for the new Escort—it has been well-planned for this market. But the sector is already well-filled by Opel, VW, Fiat and the Japanese, and Ford could have problems because it's a bit late."

A major Volkswagen dealer in Frankfurt says the recent calm in the market stems from different factors. "People are not holding back because of the new Ford, but because interest rates are too high. The biggest danger is the Japanese. Customers are ready to buy cheaper cars and they like the Japanese ones. Our cars must become cheaper, then the Japanese would have no chance."

Opel has been very aware of the new competition at the lower end of the market and its lack of a new model and as a result is to start selling the old Chevette model—imported from the UK where it is still made by Vauxhall—from next month at a price where it will clearly undercut the new Escort and Opel's own Kadett range.

As far as prices go the new Ford Escort will be pitched in the market between DM 11,295 for the cheapest model, the three-door 117i Escort, up to DM 16,890 for the top of the range Escort XR3. This span of prices which covers more than 40 different varieties of Escort

duction and are challenging the VW Golf for leadership in this market sector.

VW also has other important models in this class, however, the Jetta and Scirocco—not to mention the old VW "Beetle" which still claims some 1.4 per cent of this category ahead of modern models such as Volvo's 343 and the Alfa Romeo—which gave it a total share among the smaller medium-sized models in West Germany of 44.4 per cent in the first six months of the year. Opel took 24 per cent with its Kadett and the next challenger was a long way back in the shape of Fiat with 5.4 per cent and Honda with its Accord and Prelude models with 4.0 per cent.

The challenge posed by the Japanese is perhaps at its most serious in this category—presently, with models available from not only Honda, but also Mazda, Mitsubishi, Toyota, Nissan, Datsun. The Hercules of the Japanese challenge has been the surprise, and Japanese motor manufacturers are expected to be taking more than 10 per cent of the total market by the end of the year.

Poised

With 9.5 per cent of new car registrations in the first seven months of 1980 in the Federal Republic, they are already poised to take over as the leading importers, a role traditionally filled by the French, who could take only 9.7 per cent of the new car market in the first seven months.

Ford has not been alone in the problems it has faced in the past 12 months. Opel's share in the process of shedding about 5,900 jobs from its West German workforce and has suffered a similar drop in market share. VW is also introducing short-time working to its Audi plants this month.

However, the absence of a strong competitor in the Escort class has meant that Ford has been particularly disadvantaged. It can only hope now that German car buyers' earlier well-proven loyalty to domestic products has not been too undermined by the Japanese competition and that it can regain something of the traditional market share that it has lost in the past two years. The Escort is probably the only car that has got

Kevin Done

Production rising at updated Saarlouis factory

THE SMALL town of Saarlouis—near the so-called "diesel-dereck" or point where West Germany, France and Luxembourg meet—with its easy access to all-mainland European markets, is an integral part of Ford's campaign to launch the Escort replacement. For at its works in this small West German state the company will concentrate German production of the new model.

The 10-year-old plant at Saarlouis, with 8,400 workers and covering more than 320,000 square metres will devote itself almost exclusively to making the new Escort in future (manufacture of some spare parts and components will continue). The assembly lines for the Fiesta, Ford's other small car, have been moved to Cologne.

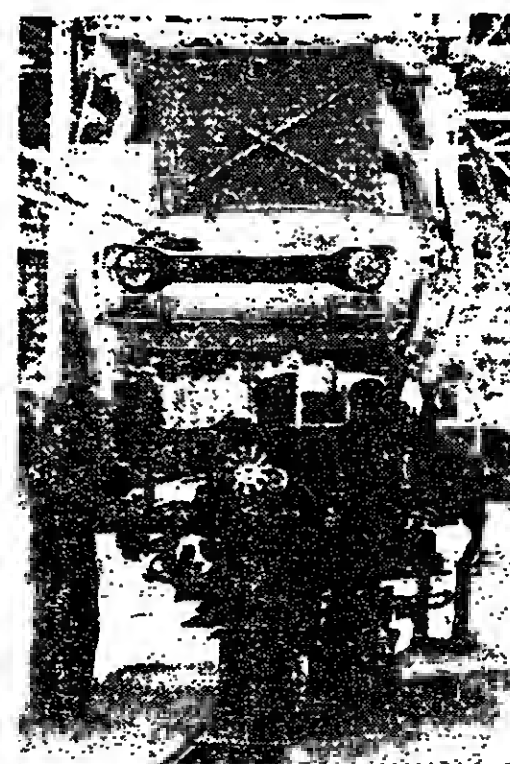
Production of the new car is already getting into high gear. Daily output in August was about 870, rising to 1,000 by the launch date. The final target of 1,140 cars a day should be reached sometime in November. This means that Saarlouis will then contribute more than 22 per cent to the total annual European and American production of the new model.

To achieve this goal Ford has invested more than DM 65m (£15.2m) in new manufacturing techniques at the Saarlouis works over the past 18 months.

Forty newly developed micro-processor-run welding robots and 120 electronic control systems have been installed to collaborate with about 50 companies. A new electronic command centre—the size of a big city telephone exchange—not only directs all the robots but also monitors their controls. This equipment, Ford of Cologne says, is the most modern used in any of its plants.

Systems

The company hastens to add that this automation will not result in loss of jobs. Workers, mechanics and engineers have either been shifted to other production sectors or trained to programme and service the new systems. Training actually began a full year before the start of the Escort's production. Ford has been at Saarlouis since 1965 when it took over the site instead of on others in the Alsace, in Coblenz or in Bochum which were also under discussion. The City of Saarlouis had made Ford's choice easier by investing in the area's infrastructure to the tune of DM 10m and by freely providing the company with development land worth nearly DM 15m.



The first car marked "Made in Saarlouis" rolled off the production lines in January, 1970 (left); now the factory aims to produce 1,140 cars a day (right)



But a number of problems had to be overcome. The economic recession in the spring of 1967 slowed down the progress of the plant, construction of which had begun a year earlier. Nonetheless, the number of workers quickly rose from a mere 85 that year to just under 6,000 in 1970 when the first car came off the production line.

By the beginning of this year Ford Saarlouis had become the third highest industrial enterprise in the Saarland with more than 8,000 people employed. Total investment had reached DM 1bn. Although this amounts to only about 3 per cent of the province's total capital investment between 1966 and 1978, it is equivalent—in its direct and indirect value—to the contribution to GNP of two of the regional mines.

Since the birth of the plant a total of 2m of the old Escort, Capri and Fiesta models have been produced. Parked behind each other, the company says in its anniversary brochure, the cars would stretch from the gate of the plant to New Delhi. The number of vehicles assembled per day had risen to 1,140 at the beginning of this year (a figure once more aimed at as soon as all changes necessary to produce the new Escort have been made) against 200 in 1970.

On the other hand, labour costs have also gone up. Against only DM 84bn in 1970, as much as DM 405bn had to be spent by this year. Trade tax payments have also soared to about DM 26bn annually against only DM 3m at the start. Today Ford contributes roughly three quarters to the total trade tax revenues of the city of Saarlouis. This means that 30 per cent of the city's budget is currently being financed by one company alone.

Buying power

At the moment the company gives work to 10 per cent of the total local labour force. This is not counting the jobs that have developed thanks to the community's increased buying power and sales possibilities. Thus, to give an example, since the start of production at the Ford works, supplies of "non-production related materials" (from toothpaste to computer spare parts) nearly doubled and sales of "auxiliary instruments" (hammers, files and so on) rose from 16,357 then to 94,314 now.

But despite this dependence, the local authorities count their blessings and use "the fruit-bearing rain which fell on the city's financial garden," in the words of the town's Lord Mayor,

to make Saarlouis steadily more attractive. A more pleasant town was striving for so that the money earned there would also be spent there.

Already a big housing complex costing DM 20m, which will one day house more than 8,000 people, is nearing completion. A park with rare birds and fishing was opened recently. Among other attractions several gymnasiums, an outdoor pool, a riding hall, a cultural centre and a new school were built. But most important the old city centre was turned into a pedestrian zone with many new restaurants, department stores and boutiques.

The coming of Ford more than a decade ago seems to have dispersed the clouds of unemployment and a mono-structured industry which haug not only over Saarlouis but over the whole region—at least for the time being.

In 1960 only about 1,000 people were employed in the Saarland's motor industry which produced a total turnover of roughly DM 12m. Now the volume of turnover has gone up to just under DM 3bn of the Saarland's total exports of DM 6bn in 1978 to the rest of the country and abroad, with Ford Saarlouis' share an estimated 20 per cent.

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FORD'S WORLD CAR IX

Pricing problems in the U.S. market

FORD's Escort-Lynx is unusual in the U.S. for being more than a world car. It also straddles two size classifications which Americans understand as the "subcompact" and "compact." With a wheelbase of 94.2 inches and an overall length of 144.1 inches, according to model, it is definitely a subcompact. But says Ford — and no one seems to be challenging the assertion — in terms of interior size, the car is a compact.

This, sales point, however, could turn out negatively for Ford if the U.S. car-buyer's mind is, as many in Detroit argue, really focussed on the traditional classifications. More important, the hybrid nature of these products creates special problems when it comes to pricing.

Ford has already announced that it will sell its simplest, untrimmed Escort in the U.S. for \$5,158, with the most sophisticated versions topping the \$7,000 mark. These prices make the basic Escort \$1,000 cheaper than the General Motors X-body car (such as the Chevrolet Citation) and Chrysler's new K-car, which are both compacts.

But it will not make the Escort price competitive with the cheapest Japanese imports, or even with the Chevrolet Chevette, which starts at \$4,672. In the two-door version, which is more closely comparable with the Escort, the Chevette is priced at \$5,111 on the West Coast, where Japanese competition is most fierce.

Ford has ruled out a cut-price Escort. Cost option. The Japanese, meanwhile, have not yet made all their pricing intentions clear, but it is certain that there will be some, possibly as many as ten, Japanese models available in October at between \$4,000 and 4,500 each.

Ford's strategy of aggressive pricing, which is designed to reverse the decline in market share (below 20 per cent in the first eight months of the year, compared with nearly 26 per cent in the same period last year, excluding imports) is therefore under challenge. And even at this level, the lower range of Ford's prices is not thought by industry analysts to

allow for any profit margin. That is how tough the U.S. car market is these days.

Working in Ford's favour is the fact that GM in short of components for the Chevette, the top-selling U.S.-built car in 1980, and cannot extend production. It will be six months before GM's new subcompact, the J car, is unveiled, giving Ford valuable breathing space. Ford also hopes that the Japanese will be deterred from too aggressive a pricing strategy by the threat of political repercussions in the U.S. if they further extend their market share. At present, Japan accounts for three-quarters of the cars imported into the U.S.

Outdated

Chrysler, meanwhile, hardly presents a challenge. Its subcompact Horizon and Omni models, which look rather like the Volkswagen Rabbit (or Golf) have been moderately successful in the last year. But they are outdated and must expect to suffer seriously from the Escort-Lynx competition.

The K-car, in spite of Chrysler's vaunted claim that it has become the U.S.'s first specialist small car builder, is not a small car—at least not to European eyes. It is a compact, but its styling and appearance are even more so than the X bodies of GM, designed to appeal to Americans unwilling to accept the day of the small car. It is a small, fuel-efficient (by American standards) car, which looks big enough to carry the family and the golf-clubs.

There are two schools of thought about where American car-buying tastes are heading and that too is important for Ford. The first, which is more appealing to Ford, is that the market will continue to demand more and more subcompact cars, and that even if the imports continue to sell heavily (they now have nearly 30 per cent of the market), there is room for Ford's new subcompact.

The other argument was voiced a few days ago by Mr. Dale Dawkins, a vice-president of American Motors, the small U.S. motor-manufacturer which makes the Jeep and sells imported Renaults in the U.S.

He pointed out that in the last year 65 per cent of all the cars sold in the U.S. were small (that is compact or smaller), whereas the existing fleet is balanced in the opposite direction, comprising 65 per cent large cars and 35 per cent small.

Mr. Dawkins' conclusion is that there are a lot of frustrated Americans driving around, waiting for a chance, as the economy recovers, to buy a nice new large car, albeit with much better fuel performance than the trade-in. If that happens, Ford, whose entire energies are going into pushing the Escort-Lynx, could be seriously embarrassed, even though the company does have some restyled, moderately fuel-efficient larger cars from previously poorly-timed product ranges.

An outcome which would please everyone, of course, would be a straightforward boom in the car market. This view has some adherents, although with interest rates again rising in the U.S. and the underlying rate of inflation unchecked, it is to say the least a highly optimistic interpretation of events.

The other big competitive factor governing the success or otherwise of the Escort-Lynx will be fuel economy. Although

the car is by far Ford's best offering to date in the U.S. in this respect, it was still far from making the top ten table of the most fuel-thrifty cars published recently for the New Model Year by the U.S. Government.

Encouraged

The survey showed the VW Rabbit diesel way ahead at 42 miles per American gallon, followed by eight Japanese cars, some of them captive imports of the U.S. companies. The bottom car in the top ten, the Mazda GLC, at 35 mpg, is a full 5 mpg better than the Escort.

But in other respects, Ford has reason to be encouraged. The Chevette was a sell-out despite the fact that it too manages only 30 mpg in the Government list. And there is no doubt that the U.S. companies, with their strong dealer networks, powerful advertising and perhaps, a touch of patriotic sentiment in their market, ought to be able to do much better this model year than they did in the last one.

If they do not, the future for both Chrysler and Ford is very bleak indeed.

Ian Hargreaves

PROFILE:

Philip Caldwell



WHEN Henry Ford II stepped down last spring as chairman of Ford, clearing the way for his personal nominee, Philip Caldwell, to take the reins, the reaction in Detroit was rather like that in Hollywood at the passing of some great but scandal-ridden actor.

"All the great characters are gone," was the standard reaction—with the addendum: "Except for Lee Iacocca at Chrysler, and look what kind of a job he has got."

The sense that an era was ending and the style changing at Ford was enhanced, of course, by the memory that Mr. Ford had himself sacked Mr. Iacocca from the Ford Presidency in 1978—a fate which has also befallen several other Ford Presidents in the last decade.

But whatever Mr. Caldwell's personality, there can be no doubt that Mr. Ford, who was seen by some to be the last of the great entrepreneurs, selected Mr. Caldwell very carefully indeed.

No one could claim that Mr. Caldwell can match either Mr. Ford or Mr. Iacocca for straight gift-of-the-gob. But it can be argued that the same seat-of-the-pants marketing flair displayed by Ford's former leaders put Ford and Chrysler where they are today in the U.S.: losing massive amounts of money because they failed to see the writing on the international wall about energy prices.

Mr. Caldwell's appointment, and the appointment under him of Mr. Harold Poling to run the troubled North American motor business, are conscious attempts to harness Ford's unsurpassed experience and achievement in worldwide manufacturing to the problems of the home turf.

Competent

Both Mr. Caldwell and Mr. Poling ran Ford of Europe and, by all accounts, did an extremely competent job there. The tendency to emphasize Ford's European connection—even in some of the sales-talk surrounding the U.S. launch of the world car—shows no signs of abating. For the moment European body-styling and European fuel economy are tops in the U.S. motor scene.

Mr. Caldwell, however, is not a European. He was born in Ohio in 1920, attended Harvard Business School, had an outstanding career in the navy and joined Ford in 1953. Since then he has done a complete round of Ford jobs, in finance, products and marketing, all around the world.

Although much has been made of his lack of charisma, he comes across in fact as a tough-talking individual, not all that far removed from the Henry Ford mould. Broad-shouldered and a sharp dresser

with a taste for pale-blue silk handkerchiefs and 18th-century antiques, he is also a man who is clearly aware of what public images are about. In his home town he has continued the Ford tradition of philanthropy in the arts by emerging as a noted patron of the Detroit Symphony Orchestra.

His weakness, as a public figure, is Ford's weakness. In terms of public policy, he has felt himself obliged to renounce upon the company's long-held commitment to free trade by unequivocally demanding Government protection against Japanese car imports. He also had the added embarrassment of having to fire a senior economist whose views refused to change with the times.

Disadvantage

Caldwell's revisionism on free trade sets him a particular disadvantage in such bodies as the U.S. business round table, an exclusive and extremely influential group of the country's top chief executives, which collectively cherishes the free trading principle in its broader campaign to reduce Government interference in business.

Mr. Caldwell's hiring and firing ability, and hence his capacity to pick and retain the right men for the right jobs at the top, cannot be judged at this early stage of his chairmanship. But it is an important factor in a company which, unlike General Motors, has never in the past been afraid to admit a wrong choice. Mr. Caldwell has, however, shown resolve in tackling the uncomfortable problem of thinning out the white-collar ranks in response to Ford's straitened fortunes.

In terms of the bright and aggressive image of the U.S. car companies, Ford's earnings have not exactly helped this year. The company, along with the other U.S. motor manufacturers, has been forced to admit that it cannot compete, at the moment, on price or quality with Japan.

If the Escort-Lynx is a success and if Ford's fortunes recover as they should, it would be a mistake to count Mr. Caldwell out as a major statesman of U.S. business. This is especially true now that Mr. Thomas Murphy is about to retire from the General Motors chairmanship, giving way to Mr. Roger Smith, a straight financial executive without either Mr. Caldwell's strength of manner or his wide experience in non-financial sectors.

Caldwell may be, for the moment, trying to add a touch of European cool to the company's formerly brassy U.S. image. But one suspects that he can short with the best if he need arises.

Ian Hargreaves

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Carrier Engineering are proud to have contributed to the new Ford Escort programme by the design, manufacture and installation of a complete £1½ million enamel painting facility at Ford Motor Company's Body and Assembly Plant at Halewood. The work involved replacing an existing paint spraybooth with an 84 metre Carrier HYDROSPIN* spraybooth, complete with air plant and Carrier HYDROPAC* paint effluent collection and removal system.

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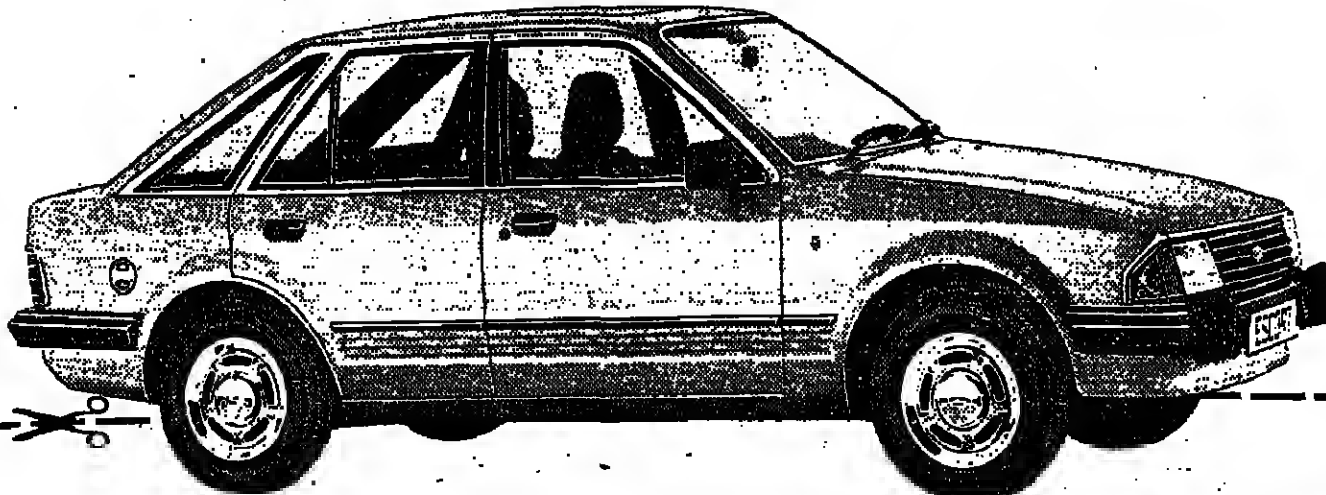
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FORD'S WORLD CAR X

Japanese market still tough

FORD DOES not expect to overwhelm the bastion-like Japanese car market with its new world car, but the company's Japanese "connections" have raised a few eyebrows in the motor industry over the past few months.

Its equity share in Toyo Kogyo, the maker of Mazdas, appears to be leading to more genuine business links. And the prospect of a joint assembly project in the U.S. with Toyota Motor, though still distant, could add a new dimension to the international motor industry. Under present circumstances, Ford's chances of making a dent in the Japanese market, along with the chances of all other foreign car makers, are very slim. The new Escort models arrive for modification in Ford's Yokohama plant in mid-October. Sales next year will probably run between 700-1,000 cars, or about one-sixth the number of cars it traditionally sells per year in Japan and 0.001 per cent of all the Erika models which will be produced next year worldwide.

Ford is the second largest-selling foreign car-maker in Japan, following Volkswagen, which leads the pack with its diesel engine Golf model. But

the share that the foreigners hold in Japan is a bare 2 per cent (expected to fall below that this year).

Many of the traditional barriers to car imports have been lifted (such as import tariffs) over the past two or three years. The fact remains, however, that the virtual exclusion of foreign cars throughout the high growth years in Japan left foreign companies with inadequate sales networks, and very little enthusiasm.

Japan was a marginal market, and the big U.S. companies were content selling a limited number of cars mostly on the strength of snob appeal. Steering-wheels on the wrong side and the price tags (normally two to three times the cost of what is available from Toyota or Nissan) ensured most Japanese would never think about buying one.

The new generation of smaller, fuel-efficient U.S. cars should in theory improve the prospects for sales. Simply because cars like the Escort are becoming more comparable to the local product. Ford, however, has only 19 dealerships in Japan. The final price of the Escort in Japan will depend heavily on exchange rate

fluctuations, but the normal mark-ups and the added expense of modifying imports to meet Japanese regulation will most likely keep the price more than twice as high as in U.S.

"Our strategy is to sell a small, fuel-efficient 1.6 litre car with the idea that it has all the U.S. luxuries," says a Ford marketing manager.

Control

Most Japanese analysts believe that a foreign car will not be truly successful in Japan, however, unless a huge investment is made to adapt the cars to Japan and establish large sales and servicing networks. Foreigners have shown little interest in spending the amount of money needed. It is arguable that the absolute control over the market held by the domestic industry would make such an effort at this time futile.

Ford's chances for selling cars in Japan in any volume are not very good, but this has not kept the company from becoming intimately involved in Japan. Ford acquired a 25 per cent share in Toyo Kogyo earlier this year, ending years of false

alarms that it was about to do so. The Ford-Toyo Kogyo talks in fact date back about a decade, to less happy days for the Hiroshima-based company.

Sumitomo Bank, the main bank which brought Toyo Kogyo back from the brink of failure after the 1973 oil crisis, had approached Ford toward the end of the 1960s with a proposal to acquire shares. At the time, Sumitomo was not at all sure that Toyo Kogyo would survive, having little confidence in the son of the company's founder, who took over after his father died. Ford, also unhappy about the management of the company, declined the offer.

The son, Mr. Kohji Matsuda, is now retired and Toyo Kogyo is back on its feet. It supplies Ford with small trucks and the transaxles used in the new front-wheel drive Escort cars. More importantly, it appears that Toyo Kogyo will help Ford in its worldwide strategy for a world car by providing cars—either in built-up or kit form—to Ford for sale (or assembly) elsewhere in Asia.

The car is expected to be a modified version of a car which Toyo Kogyo introduced earlier this year in the Japanese mar-

ket, the Familia, which will be marketed through Toyo Kogyo's own network in the U.S. and Europe.

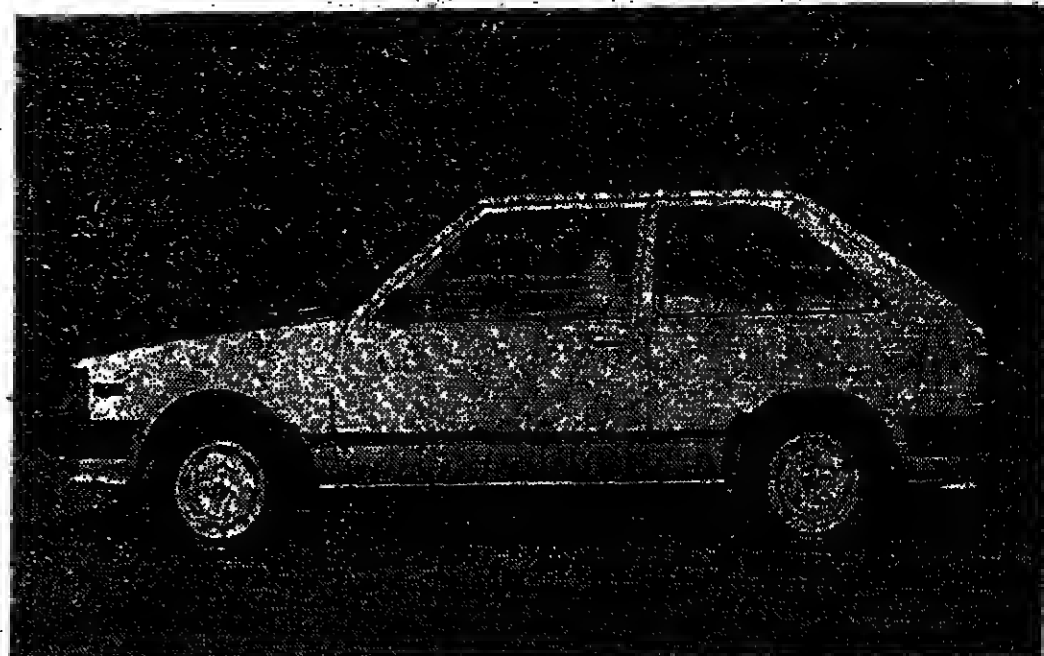
Toyo Kogyo, however, is not prepared at this time to jeopardise its own market in Japan, even to a 25 per cent shareholder. It remains to be seen whether the two companies will ever be able to co-operate further in Japan.

In the U.S., the two are about to agree on Toyo Kogyo's providing about 150,000 2,000 cc diesel engines a year, for an autumn, 1983, Ford small car model.

The likelihood that Toyo Kogyo will supply its own diesel engines to a new Ford car raises the question of how Ford and Toyota will progress on the Toyota proposal jointly to produce cars for the U.S. market.

The proposal touched a rather sensitive nerve at Sumitomo Bank and Toyo Kogyo. It is assumed that Sumitomo will use its influence to make sure that any such venture does not hurt Toyo Kogyo. There is speculation that any such Ford-Toyota venture will include Toyo Kogyo.

Richard Hanson



The Mazda 323 three-door Hatchback—the car on which the Ford Laser will be based. The Laser, which has only a passing similarity to other cars in the Erika range, is aimed at the Australian market.

FORD'S POSITION AMONG THE MAJOR MOTOR GROUPS—1979

	Country of ownership	Passenger cars*	Commercial vehicles	Turnover	Market share
General Motors	U.S.	5,092,783	1,352,469	\$46.3bn	32.6%
Ford	U.S.	2,043,014	1,032,117	\$41.5bn	31.2%
Toyota	Japan	2,111,302	884,923	¥23,10bn	22.3%
Nissan	Japan	1,738,946	598,875	¥13,30bn	12.8%
Peugeot SA*	France	1,433,775	159,268	FFr 72.8bn	FFr 11.0bn
Renault	France	1,403,949	141,046	FFr 68.5bn	FFr 10.6bn
Volkswagen	W. Germany	1,213,913	91,450	DM38.7bn	DM4.6bn

* Includes Peugeot, Citroën and Talbot.

Australia: a chance to consolidate

FORD AUSTRALIA has chosen the name Laser for its version of the new front-wheel-drive Escort. The Laser will be released in Australia in February or early March.

The company has already flown Australian distributors and dealers to Singapore to preview the new car. Naturally enough, it says they were impressed.

This, of course, is expected from a manufacturer which has a substantial share of the Australian market—some 20 per cent—and which in recent times has been puzzled about small cars.

Ford Australia is a subsidiary of Ford Canada, which in turn is a subsidiary of Ford U.S. and Ford has always seemed ambivalent about small cars in Australia.

Perhaps the "smallness" of such cars has not sat too happily with American notions

of motoring. Certainly, the Ford Escort has never commanded a substantial market share in Australia, sales running out in the first six months of this year to 4,664 vehicles, or 8.6 per cent of the small car market.

This is a market share which Ford has held with reasonable consistency in Australia with its Escorts. In 1977, 9,913 (10.6 per cent of the small car market) of these cars were sold; in 1978, 10,189 (10.9 per cent); and in 1979, 10,381 (10.8 per cent) found buyers.

But these figures have been well behind Japanese makes of comparable size. The more popular of these, notably Toyota's Corolla, Nissan's Datsun 120Y and Toyo Kogyo's Mazda 323 have virtually sold at twice this rate and in the first six months of this year it has been possible to believe that the ageing Escort was dying

on its feet.

Worse. General Motors-Holden, the Australian subsidiary of General Motors of the U.S., has always seemed one step ahead of Ford on the Australian market. Holden's Gemini, a product of Japan's Isuzu, has been sold in Australia at the rate of 20,000 a year and more for some time. Ford's Escort has never really been an answer to it.

Ford has smarted because of this. Traditionally, it has produced in Australia a range of larger cars which has proved as competitive as anything Holden has turned out and at moments Ford has come close to bettering Holden in this sector of the market.

Where Ford, and also its rival for the Australian market, Holden, has scored in the recent period, however, is in the watering down of Australian content requirements in the

manufacture of motor vehicles.

Once, this requirement stood high, around the 90 per cent level. This meant that vehicle manufacturers in Australia could not afford the luxury of a wide model range but had to concentrate basically on one model to achieve production of a reasonable and economic scale. But the local content requirement was watered down and Holden seized the opportunity to import the components from Japan to assemble 20,000 of its Gemini a year. Because the local content of Australian vehicle manufacturers is averaged across all models produced or the model mix, this worked in Holden's favour.

Ford, however, found its Escort no answer. This car did not really compete in the Australian market, although in fairness there was never anything terribly wrong with it.

The problem was that the Escort had been overtaken by similar Japanese cars; in Australia, models which were often cheaper, models which often had better resale values.

In the last year or so, however, it has become apparent that Ford has been taking its market position in Australia very seriously.

Similarity

In November 1979, Ford U.S. acquired 25 per cent of the shares of the Japanese manufacturer, Toyo Kogyo, the maker of Mazda light commercial vehicles.

The move raised Australian eyebrows: Mazda vehicles had always been distributed in Australia by other companies, and in particular on the populous Australian East Coast by a privately-owned one.

Now Ford Australia admits that its Laser, which has only

a passing similarity with the new Ford Escort/Erika cars, will be almost totally a Toyo Kogyo product.

This is a strong hint that Ford Australia ultimately will be taking over the distribution of Mazda vehicles in Australia and is moving to do so when the contracts presently held by the independents come up for renegotiation.

Ford says its Australian Laser will have little similarity with European or American models. For one, its engine and transmission will be made by Toyo Kogyo in Japan and will be different from European and American units. For another, the Laser will look different: Ford Australia says that the styling is sharper and more boxy than the Escort which has been released in Britain, although the silhouettes of the two cars are roughly similar.

Engines, apparently, will be

different again. It seems that the Toyo Kogyo engine may follow established lines in Mazda cars by having a chain-driven overhead camshaft and inclined valves. Such an engine is already fitted to the new front-wheel-drive Mazda 323.

Ford Australia's projection for its new Laser is sanguine. Up to now its Escorts have been made at its Homebush, Sydney, plant at the rate of 45 a day. This plant is being developed, Ford says, to produce 100 cars a day.

The increase suggests that Ford Australia is looking to annual sales of its new Laser of about 20,000 a year, not a dramatic figure on the Australian market. Nevertheless, in the tightly-controlled market which exists in Australia where the Government sees it as providing jobs first and car second, Ford's Laser move makes commercial sense.

These cars will be built under the complex vehicle manufacturing rules which are peculiar to Australia, and will be built shrewdly by Ford to gain every advantage it can. After all, Holden, its competitor, has shown the way.

It would be reckless to produce the Laser on the slim information that is available. There seems little doubt, however, that it will be a satisfactory small car, although perhaps not the world car it has become fashionable to talk about.

Ford, large as it is, has not been able to force its will on all markets with its new line of front-wheel-drive small cars. Yet the concept is there and as a first try on a world scale the effort is impressive. Perhaps the next try will see a greater uniformity in styling and mechanical components.

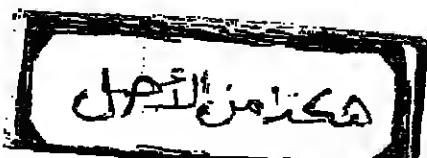
Peter Burden

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GOOD YEAR



The paradox facing General Pinochet

HUGH O'SHAUGHNESSY reports that the Chilean economy seems in better shape than for some years. But the recent referendum has brought opponents of General Pinochet's regime closer together, and the political tide may now be turning in their direction

could be a lot lower.

The proportion of total exports made up by copper has shown a tendency to decline in the last five years, and now stands just below 48 per cent. Everything seems to bear out the lavish praise that the World Bank in its study on Chile published earlier this year, heaped on General Pinochet's Government.

Things appear to be going just the way business wants. In the plebiscite, the Chilean voters opted for a continuation of military rule well into the 1990s. The latest edition of *Estrategia*, a Chilean business weekly, proclaims on its front page: "Political stability assures the sustained growth of the economy." Mr. C. Parkinson, the British Trade Minister, who went to Chile in August, was one of a number of similar visitors from Western Governments seeking closer relations with a growing economy.

It is therefore paradoxical that, when all seems to be going well for the Government, its opponents feel the tide could be turning in their direction for the first time since 1973, when General Pinochet seized power from the civilian Government of Dr. Salvador Allende. The turning point, many Government opponents say, came when General Pinochet last month announced the staging of the plebiscite. The surprise announcement acted as a catalyst to bring together—or

at least to bring more closely in touch with one another—the various opposition groups which in the previous seven years had individually been voicing what protest they could at General Pinochet's policies.

Party political opposition to the régime has been very much of a sham since 1973. The general's first task was to dissolve "Marxist" parties and forbid the centrist Christian Democratic Party and the Right-wing National Party to operate. That did not mean, of course, that they kept quiet, but they did have great difficulty in expressing themselves. The Socialist, Communist and other Left-wing supporters of the Allende Popular Unity Government went into exile, while their continual squabbling made them almost completely ineffectual for the Chileans who stayed in Chile.

After the coup, former President Eduardo Frei, leader of the Christian Democrats, gave an implicit welcome to Pinochet, thus making relations with the Socialists and Communists even worse than they had been.

It was left to the Catholic Church, under the strong leadership of Cardinal Raúl Silva, Archbishop of Santiago, to protest against the régime's many excesses and stand up for the working people who bore the brunt of the hunger and mass unemployment after the 1973 coup. Later, the Christian Democrats moved towards opposition to Pinochet but for a long

time they still appeared to be at least as opposed to Allende supporters as they were to the dictatorship.

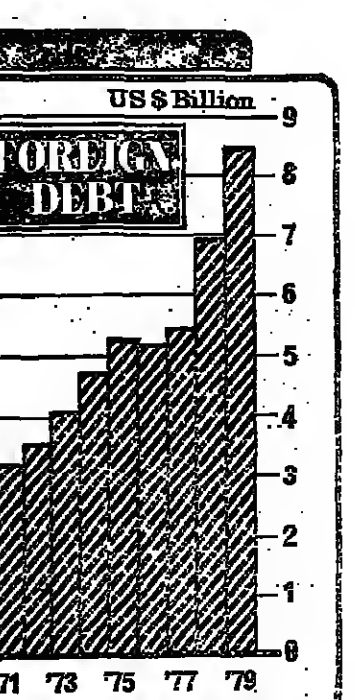
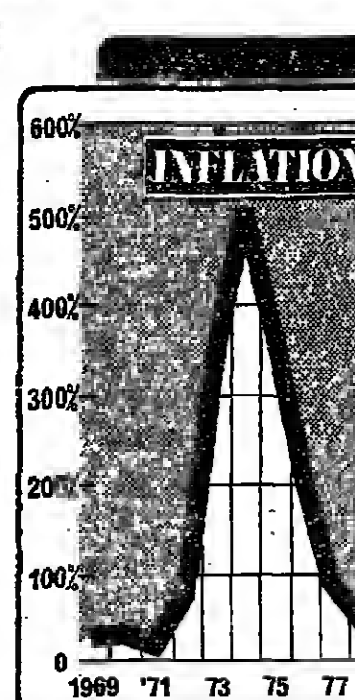
The announcement of the plebiscite changed that. Late last month, Sr. Frei came out with a strong call for an end to the dictatorship and the immediate formation of a civilian-military government which would lead the country towards democracy. His call to voters to cast their ballots against the régime in the plebiscite was echoed by many Left-wingers.

At the same time, the Church, in a solemn statement of all the Bishops, cast serious doubt on the fairness of the plebiscite. As increasing evidence comes to light of the fraudulent nature of much of the polling this month, many Christian Democrats and many Left-wingers are urging their leaders to cease their ideological wrangling and work together for the overthrow of the dictatorship.

Meanwhile, economic criticism of the régime has been growing, distinguished economists like Sr. Alejandro Foxley, arguing that there is a wide spread hunger, unemployment and impoverishment behind the smart facades.

Sr. Foxley, director of Ciep, the country's most respected think tank, closely associated with the Christian Democratic movement, says: "We are holding out that wages and salaries have not only fully recovered from the recession of past years but in fact are higher than they were. Recent economic studies show, however, that last year they were about 20 per cent lower than they were 10 years ago."

Monsignor Juan de Castro, editor of one of the leading Church publications, says: "The social cost of the present development model is obvious



over the past seven years. Take unemployment, for example. In the working class suburb of La Merced it is more than 50 per cent. Two years ago, in the suburb of Puente Alto, a survey showed that 82 per cent of the heads of households were out of work. In such circumstances, the unemployed live on the charity of their neighbours or on some relation in the countryside.

According to official statistics, unemployment, which was 12.5 per cent last year, had dropped to 11.7 per cent by June this year.

The arguments of Sr. Foxley and Mr. de Castro are fuelling controversy in the Government. On the one hand, there are those who want to continue with the present policies. On the

other, there are powerful voices who argue that General Pinochet's rule cannot but suffer if the standard of living of large parts of the population fall and wealth continues to be concentrated at the top of the social scale. This group wants a more populist, nationalist dictatorship which would be a lot tougher on foreign investors.

While opposition appears to be coalescing outside the régime, inside there are continuing reports of military unhappiness with General Pinochet. Some say that while the overwhelming majority of naval officers are pro-Pinochet, the army is about equally divided into supporters and opponents, while the air force is on the whole anti-

Pinochet. Generals have been heard to say: "We don't like Augusto trying to turn himself into Caesar Augustus." General Gustavo Leigh, Pinochet's former comrade in the ruling junta, expelled for insubordination, is a constant critic of Government policies and is well placed to take advantage of any false step by Pinochet, particularly over Chile's border dispute with Argentina over the Beagle channel of Tierra Del Fuego.

Much will depend on the determination of General Pinochet's opponents. Sr. Frei is certainly the man of the moment as far as the opposition is concerned. As a politician who won the Presidency with a landslide victory in 1964, he is a man with a large following in Chile.

But he has often found difficulty in taking decisions.

General Pinochet, for his part, has proved himself a cunning and powerful politician who has outlasted his opponents and who could prove more than a match for the Christian Democrat leader. The principal danger to him must lie in the emergence of some new political—or indeed military—leader who would wield the increasingly united opposition into an effective weapon against the dictatorship.

Whether that leader emerges or not it seems likely that the Chilean President will have to have recourse to all his political gifts to maintain the sort of society that he wants Chile to be.

Letters to the Editor

Runaway money supply

From Miss Clare Macdonald.
Sir—I am rather surprised at Mr. W. Grey's attempt (September 23) to deny the banks prior creation of the credit they lend, since the banks themselves openly admit it. I would refer him to any of the recognised banking examination textbooks, such as J. L. Hanson, which state clearly: "Every bank loan creates a deposit, thereby adding to the total of all bank deposits." This indubitably constitutes monetary issue by the banks. Further corroboration of the banking system's credit creation out of nothing by book entry can be found in the evidence of the Bank of England to the Radcliffe Committee in 1960 and similar absolutely authoritative sources in America, Canada and New Zealand.

I fail to see the logic of Mr. Grey's contention that if the Bank of England has been making a hash of it no other body is likely to do any better—one might as well ask, could it do worse.

I am not concerned about being "original" in my suggestions but am quite content to advocate that, in fact, of the repeated dismal failures of all these so-called orthodox remedies for inflation, which have been tried over and over again, and in our present crisis of mass unemployment, we should open our minds and take a long look at the fundamentally similar proposals for monetary reform which have been put forward by such men as Bishop Berkeley, the first Lord Melbourn (Alfred Mond), Professor Soddy, Christopher Hollis, MP, Dr. McNair Wilson and many others. These men were not fools and they all held that it was the responsibility of government (not private banks) to issue the nation's money supply debt free and in such quantities as to maintain stable prices. Under the present system the Government issues no money at all; it merely taxes us or borrows money from the public (savings) or from banks (new credit creations) on which interest must be paid by the taxpayers. Clare Macdonald, 70 Courland Ave., Cranbrook, 140rd, Essex.

Unit-linked policies

From Mr. M. Lynch.
Sir—Mr. Lynch's trenchant letter (September 18) in response to Eric Short's article (August 30) calls for comment. As he rightly points out the timing of premium payment is of crucial importance. If the general trend in the unit price is upwards, the best result is obtained if each premium is paid at a contemporary low point in the unit price. There is no a priori evidence that this could be better achieved by regular monthly payments instead of regular annual ones. The assertion that it is better to have performance that is poor for 23 years and spectacular for the last two than steady throughout is based upon the assumption that the overall growth over the period is predetermined, the only unknown being the path taken to achieve it. That is an academic exercise of no practical value. If the investment management is lacklustre for 23 years, it is likely to remain so for the last two.

My main criticism is of his final suggestion that the provision of pension by means of a unit-linked contract is unwise because the ultimate benefit is too volatile. I agree that the value of the unit-linked funds is volatile compared to the equivalent with-profits fund. However, if the objective is the provision of pension, what is important is the pension secured by the fund.

In the case of a unit-linked contract, if the unit price is "higher" giving an above-average fund size, this would usually be associated with "low" interest rates, leading to lower annuity rates. Conversely, if the unit price is "low" it would be associated with higher annuity rates. Consequently, the level of pension is far less volatile than the size of the fund.

In the case of a with-profits contract, the size of the fund does not vary in the same way and the ultimate pension is therefore dependent upon the annuity rates then current. This pension is more volatile than the pension provided by a unit-linked contract. This is particularly true if at the time the unit-linked policyholder was invested in a fixed interest fund. M. Iqbal, 26 Bramble Drive, Bristol.

Vehicle registration

From Mr. R. S. Anderson.
Sir—When I read Mr. Wright's correspondence (September 17) I initially thought what a ludicrous suggestion and quickly dismissed the idea as one which should be consigned to the wastebin. However, as some ludicrous ideas have a tendency to be acted upon I thought that I should list some of the reasons for my contempt. (a) Lost insurance companies do not use the same computer hardware as Swansea so there would be the simple difficulty of Swansea's computer being able to read and interpret the information. The extreme solution to this problem would be that insurance companies should all buy the same equipment irrespective of the size of the operation. In this even I wonder what the size of the small statutory addition to the premium would be? (b) As there still exist insurance companies operating efficient manual systems, Swansea's computer would be unable to deal with their data consequently eliminating the respective motorists from prosecution. Insurance companies are currently weighed down by an already heavy burden of legislation. In particular, legislation for new reporting requirements to the Department of Trade have only recently been issued. These Regulations will require, without compensation, alterations to existing systems. (d) General insurance companies transacting life business have only recently recovered from legislation covering tax relief by deduction on life premiums. In other words these companies are now acting as agents, without recompense, for the Inland Revenue. To add Mr. Wright's proposal to this duty diverts effort from the commercial viewpoint of selling products at competitive prices. (e) Why should Mr. Wright limit himself to insurance companies? Why not extend the idea to all the major banks with all their computer records being read by Inland Revenue com-

puters? This idea would help solve tax evasion. However, I am sure that Mr. Wright would be amongst the first to complain about this invasion of his privacy.

(f) Does Mr. Wright really believe that the British motorist would absorb this extra cost without complaint? With insurance premium already very high due largely to inflation, any additional premium would be strongly resisted. (g) As Swansea already have great difficulty handling the existing system, despite vast sums of money being spent on its development, can Mr. Wright be certain that it could handle his proposal? (h) How does Mr. Wright cater for those motorists who do not insure their policies? As one of his intentions is "... crime control ..." then these motorists would remain outside the law.

I am sure that there are other reasons which more educated people than myself can produce but I think that I have listed sufficient to confirm my earlier reaction. R. S. Anderson, 1, Parfour Drive, Kenley, Surrey.

Negative lending rate

From Mr. H. J. Meyer.
Sir—We are the climacteric. It is national suicide to maintain the highest international minimum lending rate at the same time as we have the highest possible exchange rate for the currency.

It does not take a financial genius (merely a Swiss banker) to establish that when the exchange rate of a currency is too expensive for both its internal trade and its export potential and threatens to suck in foreign money by its very firmness, a pecuniary on foreign money, rather than an exorbitant regard is what is required. Because of the underlying inherent strength, both of the British economy and the British natural resources (oil, coal, people) the exchange rate of the currency of the services they provide, but (equally important) the quality of these services, and other relevant factors responsible for comparative differences in performance. L. Taylor Harrington, Director, The Centre for Interim Comparison, 8 West Stockwell Street, Colchester.

Cost and efficiency

Sir—Your article (September 24) entitled "Time to call in the efficiency experts" quite rightly drew attention to the benefits local authorities can achieve from cost/efficiency assessments—particularly on a comparative basis. However, the article rather understates the degree of interest in this matter amongst local authorities. In fact, the issue is at the forefront of current thinking and action amongst both councillors and executives, many of whose authorities have already taken part in detailed performance comparisons organised by themselves and other bodies. The most recent of these related to public library systems, with 30 major local authorities participating in a pilot study which will be repeated regularly in the future on a larger scale. The aim of this and other studies which the Centre carries out is to enable local authorities to have reliable, comparable yardsticks which take into account not only the cost/efficiency of the services they provide, but (equally important) the quality of these services, and other relevant factors responsible for comparative differences in performance.

The Government is quite rightly anxious to keep the money supply and bank lending under control, and claims that high interest rates are necessary to achieve this. However, the statistics reveal a stubborn growth in Sterling M3 and bank lending "in spite of" "penal" rates of interest. Might I suggest that the growth in these statistics is actually caused by high interest rates. Sterling M3 is a very inexact and incomplete definition of money supply and much of its apparent growth has been caused by the transfer of resources not included in the definition (but nevertheless real and already in existence) into bank deposits bearing attractive rates of interest. Equally, much of the apparent growth in bank lending is due to the capitalisation by the banks of large sums of unpaid overdraft interest. A sharp reduction in interest rates would not cause the money supply to run riot in the present recessionary circumstances. On the contrary, by making bank deposits less attractive and reducing the rate of accrual of overdraft interest, the Government's desired objectives would become more capable of achievement. For your own sake as well as ours, Sir Geoffrey, lower Minimum Lending Rate now. Ian S. Muir, 10, Linn Mill, South Queensferry.

Cuts in local services

From Councillor Bryan Cassidy.
Sir—When I read your first report on Monday, September 22, of Mr. Nott's warning of the possibility of increased taxes if government expenditure is not brought under control, I thought you must have misreported him. Unfortunately, your issue of September 23 seemed to confirm the reports.

I have a great respect for Jobo Nott. He is very intelligent, shrewd and capable. I cannot believe, therefore, that he would consider seriously for a moment that increases in taxes, whether income tax or VAT, would solve the basic problem of the money supply. That basic problem as we all know is the failure of central and local government to trim their swollen bureaucracies and to exercise proper financial controls.

This was well illustrated by a report on the same page of your September 23 issue about Cambridgeshire County Council planning to axe 420 jobs by the end of the year. The list you gave referred to teachers, policemen, firemen and some administrative staff. It is the administrative staff who are most easily dispensed with in local government. Very few councils have yet grasped this

Real rate of interest

From Mr. Ian S. Muir.
Sir—The debate which rages round the Government's economic policy is being conducted by politicians of both parties (and by the media) on a level increasingly remote from the real world. Just as the weather forecaster should occasionally raise his head from his satellite photographs and look out the window, so the economist should apply common sense in the application of even the soundest theories.

The Government is quite rightly anxious to keep the money supply and bank lending under control, and claims that high interest rates are necessary to achieve this. However, the statistics reveal a stubborn growth in Sterling M3 and bank lending "in spite of" "penal" rates of interest. Might I suggest that the growth in these statistics is actually caused by high interest rates. Sterling M3 is a very inexact and incomplete definition of money supply and much of its apparent growth has been caused by the transfer of resources not included in the definition (but nevertheless real and already in existence) into bank deposits bearing attractive rates of interest. Equally, much of the apparent growth in bank lending is due to the capitalisation by the banks of large sums of unpaid overdraft interest. A sharp reduction in interest rates would not cause the money supply to run riot in the present recessionary circumstances. On the contrary, by making bank deposits less attractive and reducing the rate of accrual of overdraft interest, the Government's desired objectives would become more capable of achievement. For your own sake as well as ours, Sir Geoffrey, lower Minimum Lending Rate now. Ian S. Muir, 10, Linn Mill, South Queensferry.

The price of money
From Mr. J. N. Carpenter.
Sir—Can anyone explain to me why so many leaders of different sections of our society, clever, intelligent and successful, having a major influence on informed opinion, consider that the cost of money should be exempt from the process of inflation? Nigel Carpenter, 9, Northford Road, Dartmouth, Devon.

The price of money

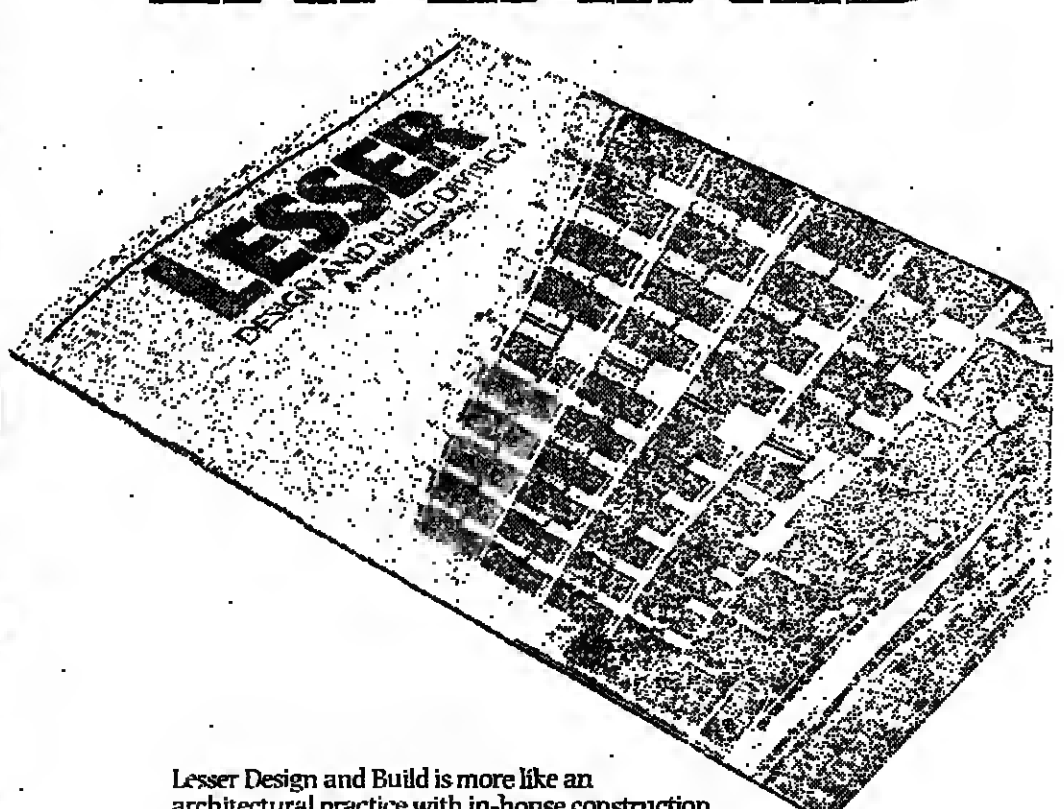
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Today's Events

OVERSEAS: Sir Geoffrey Howe, Chancellor of the Exchequer, flies to Washington for International Monetary Fund meetings to be held next week. Sterling railmen return to work in West Berlin. **COMPANY MEETINGS:** J. and J. Dyson, Cutlers' Hall, Sheffield, 12. Garford-Lilly, Great Northern Hotel, King's Cross, N. 11.30. Samuel Heath, Cobden Works, Leopold Street, Birmingham, 10. Hillards, The Post House Hotel, Queens Drive, Osselt, 12.30. Marling, Charing Cross Hotel, WC. 12. Property

SECURITY INVESTMENT TRUST: Founders Hall, 13 St. Swinburn Lane, EC. 12.30. Scottish and Mercantile Investments, Winchester House, London Wall, EC. 12. Wm. Somerville, Dalmore Mills, Milton Bridge, Penicook, Midlothian 2.30. Sound Diffusion, Datum Works, Davagor Road, Hove, Sussex, 5.30. Standard Industries, 2 Wadsworth Road, Perry Vale, Greenford, Middx., 11. Joseph Webb, Station Hotel, Dudley, 12. **COMPANY RESULTS:** Final dividends: S. Casko Holdings, Interim dividends: Hall Engineering Holdings, James Neil Holdings, Owen Owen.

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UK COMPANY NEWS

Poor second quarter for Brown & Jackson

A POOR second quarter for Brown & Jackson, building and civil engineering contractor, has reduced first-half profits in 1980 from £2.38m to £1.39m on turnover of £53.29m against £55.52m. However, the group has successfully maintained and in several cases increased its market share, but at the expense of a fall in gross margins. Conditions in the second half are likely to continue to be very tough, the directors say.

The interim dividend is being maintained at 4p per share on capital increased by the May rights issue.

The subsidiary most affected was Tigner Roche (London) which made a loss of £247,000 compared with a net profit contribution last year of £785,000. This arose from a drastic cut in gross margins and increasing provisions for slow-moving stocks.

comment

The market took its usual vengeful swipe at a faltering star yesterday when, after an interim profit collapse, the capitalisation of Brown & Jackson was slashed by a third with a 40p share price slump. This group is pinning the blame on the knitwear importing side, Tigner Roche, in which the turnaround into a £247,000 loss almost exactly matches the overall profit decline. Its high cash position was partly drained to finance inventories and, faced with disappearing demand, the subsidiary was forced to pare gross margins back to the bone to clear away the debris. Elsewhere Autogard increased its contribution from £300,000 to £504,000 and Gottfried and Paul chipped in £153,000 for the first time. Against that, the problems in the retail trade were reflected at Grakochus, the footwear business, which made £425,000 in the half year against £421,000 in only the second quarter of 1979. Brown and Jackson remains determined to stick to its acquisitive formula and should not be stymied for want of cash but the defence of market share in very tough trading conditions is taking its toll of gross margins in the second half. The message has been absorbed. After all, growth stocks do not offer prospective yields of 16.9 per cent even in a recession.

Clarke, Nickolls at £302,000

Pre-tax profits of Clarke Nickolls and Coombs, the property investment, management and development holding company, fell from £310,540 to

£302,570 in the six months to June 30, 1980.

Net rents and fees amounted to £234,403 (£236,791) but there was a net trading loss of £9,330 compared with a profit last time of £7,711. Long-term interest charges totalled £10,248 (£10,259).

General expenses were up this time from £41,500 to £60,219 and dividends and interest charges took £87,964 (£87,887).

After deducting tax of £148,000 (£130,000), a loss on exchange rates this time of £7,469 and outside interests of £16,755 (£2,208), net profits were down from £178,332 to £130,346.

The interim dividend per 25p share is up from 1.5p to 1.75p net. Last year total dividends of 3.5p were paid from pre-tax profits of £942,586.

Wiggins Teape declines in first half

FOLLOWING YESTERDAY'S announcement of group results for the first half of 1980, three BAT Industries subsidiaries have reported their figures for the period.

First-half turnover of Wiggins Teape Group, specialist paper maker, rose from £265.54m to £302.37m but pre-tax profits declined from £26.75m to £19.3m. However, profits are higher than in the second half of 1979 when they totalled £17,02m, and Mr. Patrick Best, chairman, says specialisation and a good geographical balance of business put Wiggins in a better position than most paper companies to withstand the effects of recession.

Nevertheless he takes a gloomy view of prospects for 1981, saying the year will be the toughest the company has faced for many years and trading conditions are unlikely to improve significantly before 1982.

Of the six months under review, he says profits showed a substantial decline in the UK but improved significantly in European and overseas operations.

The group attributable balance for the first half finished well down at £9.83m (£17.52m) and the interim dividend—25m last time—is being passed.

At International Stores, trading profits rose from £0.04m to £0.73m, but a £3.44m (£0.21m) net deficit on rationalisation transactions resulted in pre-tax losses of £3.17m (£2.07m).

The directors report that the improvement in trading profitability has been maintained but has been offset by the high level of rationalisation costs arising from the major restructuring of

the group's businesses following recent acquisitions and disposals. Turnover of British American Tobacco Company for six months totalled £1,845m (£1,711m), pre-tax profit rose from £112m to £122m. Tax took £56m (£46m) and minorities were £12m (same).

Blue Bird falls but pays more

SECOND HALF pre-tax profits of Blue Bird Confectionery Holdings fell from £225,530 to £93,090 and for the full year to June 23, 1980, they were down from £553,099 to £334,315. Turnover of this confectioner and toffee manufacturer was lower at £10.24m compared with £10.5m.

The board says profitability in the first half of the current year is likely to reflect that prevailing to the end of June. Nevertheless, there are indications of a moderate growth in the volume of home sales up to mid-September, and the trend is definitely upwards.

It is therefore likely that, barring unforeseen national problems, profits should be substantially better in the second half.

The pre-tax figure was struck after depreciation and interest of £244,488 (£160,598) and exception debits of £61,469 (£27,836). After tax substantially higher at £158,062 (£43,037), attributable profit is £178,253 (£510,062) and stated earnings per 25p share are 4.8p (13.9p). The net final dividend is raised from 2.5p to 2.9p for a total of 4.35p (3.75p).

The board says the increased dividend reflects its view that returns on ordinary shares generally in the UK are too low, particularly when compared with interest rates. It also reflects some cautious optimism for the future, resulting from the extra efforts by all members of the company since the end of the financial year.

Union to fight

THE EXECUTIVE of the 187,000-strong Union of Communication Workers decided yesterday to oppose at next week's Labour Party conference the mandatory reselection of MPs and to support the original Mikardo proposal on the issue. It also decided to oppose the other Leftist proposals for an electoral college to select the party's leader and for the NEC to draw up the manifesto.

Haden Carrier up to £1.69m

FROM increased turnover of £107.25m against £99.1m, profits before tax of Haden Carrier, building services and metal finishing engineer, rose from £1.15m to £1.69m in the first six months of 1980.

Mr. P. G. Simons, chairman, says the year is developing in the manner forecast in his statement in the last annual report, and should maintain the steady improvement achieved in the past two years.

The interim dividend is being lifted from 3.25p to 3.6p. Last year's total was 10p from pre-tax profits of £3.78m.

The chairman says that demand for the group's mechanical and electrical engineering services in the UK has held up well and in the Middle East, improved performance on current contracts has been maintained.

In metal finishing operations, there has been a steady performance in UK and Spain, coupled with good order intakes in U.S., France and Belgium.

comment

Haden Carrier's 46 per cent pre-tax profit increase in the first half is due mainly to the elimination of losses in France and the Middle East. In the Middle East, the past few years from two large unprofitable contracts, new work is yielding more satisfactory results. In France and in the U.S., Carrier Drysys is enjoying a surge of orders for its metal paint shops as the major U.S. car manufacturers set out for small car production. Profits at Universal King in the U.S., where a new conveyor system factory has been built, have been slower to develop and the Australian loss, £300,000 last year, will be reduced but not eliminated this year. Margins in the UK where the group does half its business, are under pressure but the outlook for the remainder of the year remains very promising.

Group pre-tax profit could reach £4.5m. Even after the shares gained 7p yesterday to 146p, the prospective fully-taxed p/e is only about 5 and the prospective yield a tantalising 11 per cent.

Waring and Gillow's U.S. expansion

Waring and Gillow, the stores company, has purchased Kimels, a U.S. company operating three furnishing stores, for \$2m cash. Waring and Gillow is to

acquire two further stores at Tampa and Clearwater in Florida, and is currently looking at other areas in which to expand, including Philadelphia and Orlando.

Waring also said the integration of Maples was progressing smoothly.

J. Makin improves to £1.18m

PROFITS before tax of J. and J. Makin Paper Mills increased from £1.11m to £1.18m in the year ended March 31, 1980, on turnover of £17.32m compared with £13.79m. The improvement in profit is due to the paper side associate were lower.

Profits have held up well in the current year's first half, despite difficulties in the paper industry but there is now short-time working in some sections. The metal powder company is still depressed in view of its dependence on the motor trade, the directors say.

For the following half-year to March 31 next year, the outlook is anything but promising and in view of the current uncertainties, the Board has decided to keep the dividend at the previous year's level—the total is 3p with a final payment of 2p.

OEM slips in first six months

TAXABLE profits of Office and Electronic Machines, office equipment distributor, slipped from £1.48m to £1.37m in the first six months of 1980, on turnover down 9.7 per cent at £12.28m. While they expect trading conditions to remain difficult for the second half, directors say the group is maintaining its market share.

They are repeating the interim dividend of 2.5p—last year a total of 5.5p was paid from pre-tax profits of £3.1m.

Earnings after tax of £713,253 (£767,571), are shown as 10.75p (11.56p). The dividend absorbs £153,122 (same), leaving a retained surplus of £560,266 (£555,320). Depreciation this time amounted to £62,801 (£64,416).

APV increases overseas profits but down overall

PRE-TAX PROFITS of APV Holdings dropped by £302,000 to £7.41m in the half-year to June 30, 1980. Turnover, excluding inter-company sales, was up from £120.85m to £134.95m.

Mr. H. P. N. Benson, chairman of this holding company engaged in development, manufacture, sale and installation of specialised process plant, says the group's UK companies contributed less than last year in spite of higher turnover, thus emphasising the pressure on margins. The overseas companies increased their profits by £500,000 despite a loss on currency translation of £128,000.

He says he expects the group to follow its usual pattern of higher profits in the second half, but although overseas profits for the 12 months should exceed last year, the effects of the recession in the UK will continue to be felt. Group profits for the year are unlikely to reach last year's £19m, he adds.

Trading profit of the parent company and its subsidiaries was down from £8.58m to £8.64m. Associates share was a loss of £37,000 (£34,000). Interest was higher at £1.2m (£1.1m) and after tax of £3.11m (£3.26m), stated earnings per 50p share are 14.7p (15.3p) basic, and 13.2p (13.8p) fully diluted.

The interim dividend is unchanged at 2.5p—last year's total was 8.4p.

Commenting on the first half's figures, Mr. Benson says order intake was £14m compared with £12.2m in 1979 using the same exchange rates. The first three months were particularly good at £7.9m, but there was a reduction in the second quarter to £6.5m and as yet there is no sign of a recovery.

He says the UK orders have been particularly affected since April, not only by the recession in the home market, but also by the strength of sterling coupled with the high inflation rates. This makes the group less competitive in export markets.

comment

The market had already decided that the historically strong contracting engineers were capable of outperforming the market and the recent rise in the Simon Engineering and now the APV share price in response to interim figures reinforces this belief. Both stocks are within an ace of the annual peak and are clearly independent of income as a support. Up 12p to 215p yesterday, APV now yields 5.6 per cent historically which is very much in line with Simon at 286p. The benefits of international expertise, large unbroken track records and wide geographical business spreads

have not been overlooked but an investment decision at this point, and it would be a fine comparative judgment, might be influenced by the fact that Simon is taking in net interest of about £1m while APV is paying broadly the same amount to service debt. Simon's interim profits grew fractionally after six months. St. Regis' big stake does limit APV's marketability but in the context of long-term contracts, slight profit growth differentials need not mean much over a six month span.

Berkeley Hambro advances

GROSS INCOME of Berkeley Hambro Property Company for the six months to June 30, 1980, totalled £3.24m compared with £3.57 in the corresponding period last year. This included rental income of £2.58m, against £2.81m.

Pre-tax profits were up from £1.96m to £2.1m after property outgoings and management expenses of £1.2m (£1.21m), interest charges of £400,000 (£310,000) and receivable interest of £448,000 (£495,000).

Mr. Jocelyn Hambro, chairman, says that approximately 60 per cent of the group's profits last year were earned in the first half. He anticipates earnings will be more evenly spread this year and will show an improvement over last year.

The tax charge this time was £788,000 against £681,000. Stated earnings per 25p share were better at 7.73p (7.58p). The interim dividend is up from 2.5p to 3p net. Last year total dividends of 5.5p were paid from pre-tax profits of £3.58m.

Streeters back in profit

DESPITE turnover sliding from £8.35m to £5.47m, Streeters of Godalming, the public works contractor, bounced back into profit in the first half of 1980.

For the period, the company announces a taxable surplus of £147,000, compared with a loss

of £394,000. There was a deficit of £104m for the whole of the previous year. The half-time figure was struck after profits of associated companies amounting to £75,000 (£13,000).

The directors say the results for the six months justify the policies of preserving the group's traditional markets, but they warn that trading conditions continue to be difficult.

Stated earnings per 10p share are 0.9p (2.4p loss) after a tax charge this time of £27,000, against a credit of £295,000.

There is again no interim dividend. The last payment was in 1977 when a total equal to 1.60p net was paid.

The sale of the group's shares, held in Rees-Hough has been completed and negotiations are continuing for the disposal of its holding in Short's Trench Systems.

Barlow upsurge to £1.91m

Taxable profits of Barlow Holdings advanced in the first half of 1980 from £1.58m to £1.91m. Sales edged ahead to £5.8m, compared with £5.5m.

During the six months, profitability was maintained, but sales fell from £5.8m to £5.5m. But increased earnings from other sources outweighed the shortfall from the cocoa drop as predicted by the chairman in his statement in July.

Rubber contributed a stable profit in the half year of £384,399 (£225,618) and £191,000 and copolymers £723,498 (£700,300). The exceptional price levels of the previous two years are unlikely to be repeated in the very near future, the directors warn.

The interim dividend is a same again 1p net. Last year a final of 2p was paid from pre-tax profits of £3.58m.

Tax for the six months took £384,399 (£225,618), leaving stated earnings per 10p share up from 1.56p to 1.99p.

There was a profit on the sale of investments during the period of £168,285 (nil). However, dividends and interest took £384,399 (£225,618) and minorities (nil).

The comparative figures for the half year include only three months from Moor River Rubber Co.

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MINING NEWS

Renison finds more tin ore

BY KENNETH MARSTON, MINING EDITOR

THE Consolidated Gold Fields group's highly profitable Renison tin operation in Tasmania has increased its ore potential. At the Sydney meeting Mr. Ryan, the chairman, said that exploration of the mining lease area has defined sufficient new ore reserves which compensate for ore mined and add a further 700,000 tonnes to the ore reserves.

In addition, exploration work off the mine lease area has proved encouraging in the Blue Tier area of north-east Tasmania in which Renison has a 61 per cent interest. Drilling has indicated a moderate tonnage of low grade, but metallurgically simple, tin mineralisation.

Mr. Ryan said that studies of the Blue Tier area show that the grade may support a viable operation if the ore tonnage can be expanded. So far the tonnage necessary to support a mining operation there has not been defined.

The meeting approved Renison's capital proposals. These are that each of the fully paid 50 cent shares be subdivided into two shares of 25 cents. The company will now go ahead with the already announced scrip issue of three new 25 cent shares for each 20 scrip shares of 25 cents held on October 16.

In the year to last June when Gold Fields group profit before interest and tax advanced by 51 per cent to £199.7m, the contribution of mining operations of subsidiary companies jumped by 148 per cent to £20.8m and the largest contributor in this section was again Renison.

South Crofty opposition

THE BOARD of South Crofty, the Cornish tin mining company controlled by Sir Piran, yesterday faced a revolt of small shareholders at the Camborne annual meeting.

Former South Crofty chairman, Colonel Peter Buchanan, there was a demand for a board reconstruction so that a majority of directors would again be Cornish residents.

From the attending shareholders in general there was a decisive show of hands against the re-election of Sir Piran, non-affiliated directors, including the chairman, Mr. Malcolm Sims. The others were Messrs. Victor Skinner, William Shaw and J. S. Barnett.

There was an equally decisive

Duiker raising funds for new gold venture

LARGELY in order to finance its initial share of the development cost of the proposed new gold mining operation in South Africa's Erisedel - Dankbaar area of the Orange Free State, the Leunro group's Duiker Exploration is to make a rights issue. Further details, it is stated, will be announced on or before October 6.

It is added, however, that Twickenham United Collieries and Witbank Consolidated Coal Mines, which are the beneficial owners of approximately 28.5 per cent and 15 per cent respectively of Duiker, will renounce their entitlements in the issue in favour of their shareholders. The latter will be offered these share entitlements direct by Duiker.

Mining rights to the Erisedel - Dankbaar area are owned as to 60 per cent by the Anglo American Corporation group and 40 per cent by Duiker. Although the area contains some 62m tonnes of mineable ore, the gold grade is low at about 4.5 grammes per tonne and it would probably not be a profitable proposition as a mine in its own right.

But, as reported here in July, the plan is to tackle it as an extension of the existing Free State Saaplaas mine. The nearby Welkom and Western Holdings mines are to be combined and Free State Saaplaas will be the enlarged mining lease area to Western Holdings thereby making use of both operating and, importantly, tax advantages.

Gross revenue and expenditure of the new mining area will be shared 15 per cent by Western Holdings and 85 per cent by a new company to be formed. Initial holders of the new company will be Anglo American and participants 44.5 per cent, Anglo American Gold Investment 9.5 per cent, Duiker 36 per cent and Western 10 per cent. A listing for shares in the new company will be considered in due course.

Dividend after eight years

The first dividend since 1973 will be paid by Southern Peru Copper Corporation Unit which is 52.3 per cent owned by Asarco.

The dividend and a joint venture distribution will amount to about \$69.7m (£29m).

Southern Peru will pay \$42.5m to its shareholders in accordance with their investment in class A shares and to \$27.2m to the balance of \$27.4m will go to Royal Dutch Shell Group's 81.1 per cent interest in the \$72m Cuajone copper project.

Asarco said payments on class A shares and to \$27.2m to represent a priority distribution in accordance with previous arrangements made to secure the equity capital needed to complete the Cuajone mine. Asarco will receive \$25.4m and among the other shareholders Marmoon Group will receive \$2.8m, Newmont Mining Corporation \$6.4m, and Phelps Dodge Corporation \$7.9m.

Ransomes lays off 400

BY ELAINE WILLIAMS

ABOUT 400 redundancies and short-time for 2,000 workers were announced yesterday by Ransomes, Sims and Jeffries, the Ipswich agricultural machinery manufacturer.

Production is to be cut by 20 per cent with most workers starting a four-day week from Monday. Talks are taking place between unions and management to discuss the cuts.

A further 100 jobs could be lost at Richard Garrett, the engineering company based at

Leiston, Suffolk over the next two weeks.

The Official Receiver was called in two months ago when Garretts failed to raise £1m from bankers to keep themselves operating. Negotiations over the company's future continue.

The engineering company of Charles Wicksteed of Kettering, Northants, is to close its machine tool division after 70 years' operation. One quarter of the company's 200 strong workforce is to be made redundant next month. Wicksteed will concentrate, instead, on the manufacture of children's playground equipment.

Esso plan for chemical plant is approved

By Martin Dickson

ESSO CHEMICALS has been given the go-ahead by Eire Region's planning committee to change the location of its planned \$300m ethylene cracker from one part of the huge Mossburn petro-chemicals complex to another part of the site.

Esso was given planning permission for the plant by the Government last year. But in March, the company applied to change the cracker's location from the northeast quadrant of the Mossburn site to the southwest one. This would allow the northern part of the site to be left free for downstream petrochemicals works.

Esso expects to start site preparation in March next year and to bring the cracker on stream by the end of 1984. There has been no indication which downstream plants might make use of the cracker's ethylene—a basic building block of the chemicals industry. But Esso said recently that Mossburn was one of a number of European locations where it was considering further downstream activity.

High Court post for Thorpe case prosecutor

MR. PETER TAYLOR, QC, who conducted the prosecution in the Jeremy Thorpe trial last year, has been appointed a High Court judge, it was announced today.

He succeeds Mr. Justice Griffiths who was appointed a Lord Justice of Appeal in July. Five new circuit judges and three recorders were also named today.

The judges are, for the south-eastern circuit, Mr. Francis John Agliorby, Mr. John Hunter, Mr. Aron Owen and Mr. Alistair Newburn Troup.

SPAIN		Price	Change	%
September 25				
Banco Bilbao	228	+2		
Banco de España	210			
Banco Exterior	217	+2		
Banco Hispano	220			
Banco Ind. y Com.	121			
Banco Madrid	221			
Banco Santander	221			
Banco Urquijo	136			
Banco Vizcaya	248	+2		
Banco Zaragoza	243			
Gasolinas	110			
Gasolinas Zina	72	-1		
Pecsa	63.7	+0.8		
Gal. Precidioso	31.5	+2.5		
Indra	68.7	-0.3		
Iberdrola	65.5	-0.5		
Petróleo	112	+1		
Petróleo	102	+1		
Sociedad	102			
Telefonos	63.5	+0.8		
Union Elect.	68.5			

Manor National dives into loss

CONSIDERABLY lower trading margins and unexpected problems over the acquisition of C.G.S.B. Holdings has resulted in Manor National Group Motors reporting a loss of £21,000 for the half-year to June 30, 1980. Last time there was a pre-tax profit of £723,000. Turnover climbed from £24.33m to £33.95m.

The chairman says strong action has been taken at C.G.S.B. to reduce current trading losses. Stocks and debtors have been reduced overhauling has been identified and a redundancy programme carried out; unprofitable branches have been closed and consequently bank borrowings have been lowered by £1m.

Steps have been taken to improve profit margins, and as a result the way has been paved for achieving profitability.

With regard to C.G.S.B., the chairman reported in his last annual statement: "Profits for the year ended September 30, 1979, had been estimated at £45,000. The audited accounts for the 15 months to December 31, 1979, show losses of £215,000, and trading for the first three months of 1980 continues to show losses."

He now says it is evident from reports received from the auditors that "adjustments will be required to the reserves at January 1, 1980, to allow for what, in the board's view, is an over-valuation of stocks at that date. In the light of this and the assurances given in the offer document by the C.G.S.B. directors and their advisers, further professional advice is being sought."

No interim dividend is being paid against 1p last time and a total of 2.5p from pre-tax profits of £1.22m. The board says favourable consideration will be given to the payment of a final dividend when the results for the full year have been ascertained.

The company is looking to British Leyland for new models to assist sales and profits. With the new full and Metro, the expected increase in sales volume and profitability. This, together with other model improvements will, in the short term, assist until the new Barchin model is introduced from which the company expects long-term benefit.

Difficult trading conditions are very much in evidence, says the

Setback for Hunt & Moscrop

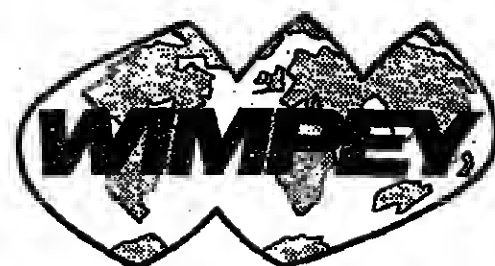
WITH second half pre-tax profits plunging from £284,568 to £50,113, Hunt and Moscrop (Middleton), industrial machinery manufacturer, reports figures down from £280,568 to £258,113 for the full year to June 30, 1980. Turnover was slightly lower at £20.04m compared with £20.48m.

The chairman says trading conditions continued to be extremely difficult in the second half, with the high cost of borrowing adversely affecting the results. Interest charges for the year amounted for £226,263 (£161,511).

The reorganisation programme is producing a more efficient structure well able to cope with the varying demands in this sector. The combination of this and the improving cash generation means the board can recommend the maintenance of the final dividend. This will be 0.5425p net against 0.5427p for a full year of 0.5p (0.5002p). Dividends absorb £210,304 (£210,353).

Trading profit for the year was £503,760 (£111m). Associates losses were £18,384 (£16,257) and after minorities of £9,830 (£4,593), net profit came out at £221,444 (£713,196). Reorganisation costs, less tax, amounted to £501,742 (£20,881). Reserves at June 30 were lower at £2.86m compared with £3.17m.

The directors believe that from the current order position, the group is maintaining its share of the market with export sales continuing at reasonable levels.



Interim Statement

	6 months to 30.6.80 £m	6 months to 30.6.79 £m	Year 1979 £m
Turnover: Work carried out by the Group including attributable Share of Associates	510.0	428.0	1004.0
Operating Profit including Share of Associates	18.0	12.0	58.9
Interest Payable less Receivable	8.6	3.6	12.6
Profit Before Taxation	9.4	8.4	47.3
Taxation	2.4	2.0	6.6
	7.0	6.4	40.7
Attributable Minority Losses/(Profits)	0.3	(0.1)	0.2
Profit After Taxation	7.3	6.3	40.9
Attributable to Shareholders	0.8	-	-
Extraordinary Items	-	-	-
Profit After Taxation and Extraordinary Items Attributable to Shareholders	8.1	6.3	40.9

The Directors have declared an interim dividend of 0.85p per share (0.75p) totalling £2176,000 (£1,920,000) which will be paid on 8th January, 1981 to all shareholders on the register at 7th November, 1980.

The Chairman Mr. R. R. Smith, comments:

During the first six months of 1980 good progress has been made on contracts at home and overseas. In the United Kingdom the number of legally completed house sales was higher than during the same period in 1979. The increase in turnover of 18% and in profit before tax of 12% is partly due to the more normal working conditions in the United Kingdom compared with those caused by the bad weather in early 1979. The £800,000 extraordinary profit arises from the sale of an investment.

In reviewing prospects for the full year it must be said that, in common with many other companies, we had hoped for a more substantial reduction in interest rates by the middle of the year. Although present borrowings are below the level they were in December 1979, the current

interest rates not only reduce profits but deter investment by potential customers. There is evidence that since May there has been a marked reduction of deposits placed by intending house purchasers, the full effects of which will not be felt until next year. Despite these factors we are of the opinion that the results for the year will be satisfactory considering the depression in the UK and the pressures in overseas markets.

Although the order book at the end of June was higher in real terms than at the same time in 1979, I still hold the view expressed at the Annual General Meeting that 1981 could be our most difficult year.

George Wimpey Limited.
Hammersmith Grove,
London W6 7EN.



LONDON TRADED OPTIONS									
		Oct.		Jan.		April			
Option	Exercises Closing price offer	Vol.	Closing offer	Vol.	Closing offer	Vol.	Closing offer	Vol.	Equity close
BP	300	94	110	80	85	85	388p		
BP	330	64	1	86	3	86	"		
BP	360	54	63	56	76	76	"		
BP	390	12	54	71	94	94	"		
BP	420	4	46	4	46	46	"		
Com. Union	140	37	17	8	28	28	177p		
Com. Union	160	17	8	28	28	28	"		
Cons. Gold	500	147	41	160	2	163	645p		
Cons. Gold	550	97	20	125	2	145	"		
Cons. Gold	600	43	139	43	118	118	"		
Cons. Gold	650	81	55	68	28	89	"		
Courtaulds	80	10	10	14	14	14	57p		
GEC	650	158	3	35	3	55	517p		
Grand Met.	140	24	1	1	1	1	165p		
Grand Met.	160	14	45	24	17	28	"		
IGI	390	14	13	13	21	21	355p		
Land Secs.	350	38	6	152	8	181	581p		
Land Secs.	390	11	65	35	15	48	"		
Shell	390	43	104	80	90	96	428p		
Shell	430	3	10	81	37	74	"		
Shell	460	3	10	81	37	74	"		
Totals		751		382	6				

M. J. H. Nightingale & Co. Limited									
27/28 Lovat Lane London EC3R 8EB Telephone 01-421 7212									
1979-80		Price		Gross		Yield		P/E	
High	Low	Company	Change	Div (p)	%	Div	%	Div	%
50	48	Airproducts	48	-1	6.7	13.7	2.9		
50	21	Armstrong and Rhodes	22	-1	1.4	8.4	9.1		
173	92	Bardon Hill	172	-1	8.7	5.8	8.5		
100	74	County Carr 10.7% Pl.	74	-1	15.3	2.7	10.7		
101	69	Daborn Dnt.	69	-1	5.5	5.4	4.7		
126	88	Frank Horrell	121	-1	7.9	8.5	3.8		
125	86	Frederick Parker	86	-1	11.0	16.7	3.0		
152	82	George Shaw	82	-1	3.1	3.8			
84	45	Jackson Group	82	+1	6.0	7.3	3.1		
153	103	James Burrrough	121	-1	7.9	10.5	8.9		
235	242	Robert James	235	-1	31.3	10.2	8.7		
232	176	Torday	220	-1	15.1	6.9	8.7		
34	10	Twinklack Ltd.	114	-1	15.0	18.5			
91	70	Twinklack 15% ULS	81	-1	3.0	6.8	6.8		
58	23	Unilock Holdings	45	-1	5.7	5.7	5.5		
101	42	Walter Alexander	100	-1	12.1	5.0	5.5		
245	124	W. S. Yates	241	-1	12.1	5.0	5.5		

† Accounts not prepared under provisions of SSAP 15.

ENGINEERING FACTORY FOR SALE

As An Ongoing Business

O'Connor Engineering Limited (in receivership) manufactures agricultural machinery and operates an engineering plant at Tubber, Co. Clare, Ireland.

Dermot Fitzgerald, receiver and manager of O'Connor Engineering Limited is offering the following for sale:-

Factory premises of 50,000 sq. ft. covered area on a site of five acres.

Plant, machinery, fixtures and fittings, raw material, work-in-progress and finished stock.

A skilled workforce and nationwide network of dealers is available.

For further details and permission to inspect apply to the Receiver:-

Dermot Fitzgerald F.C.A.,

Craig Gardner & Co.,

Sarsfield House, Francis Street, Limerick

HALF-YEAR REPORT 1980

VICKERS LIMITED

Unaudited results for the six months ended 30th June 1980

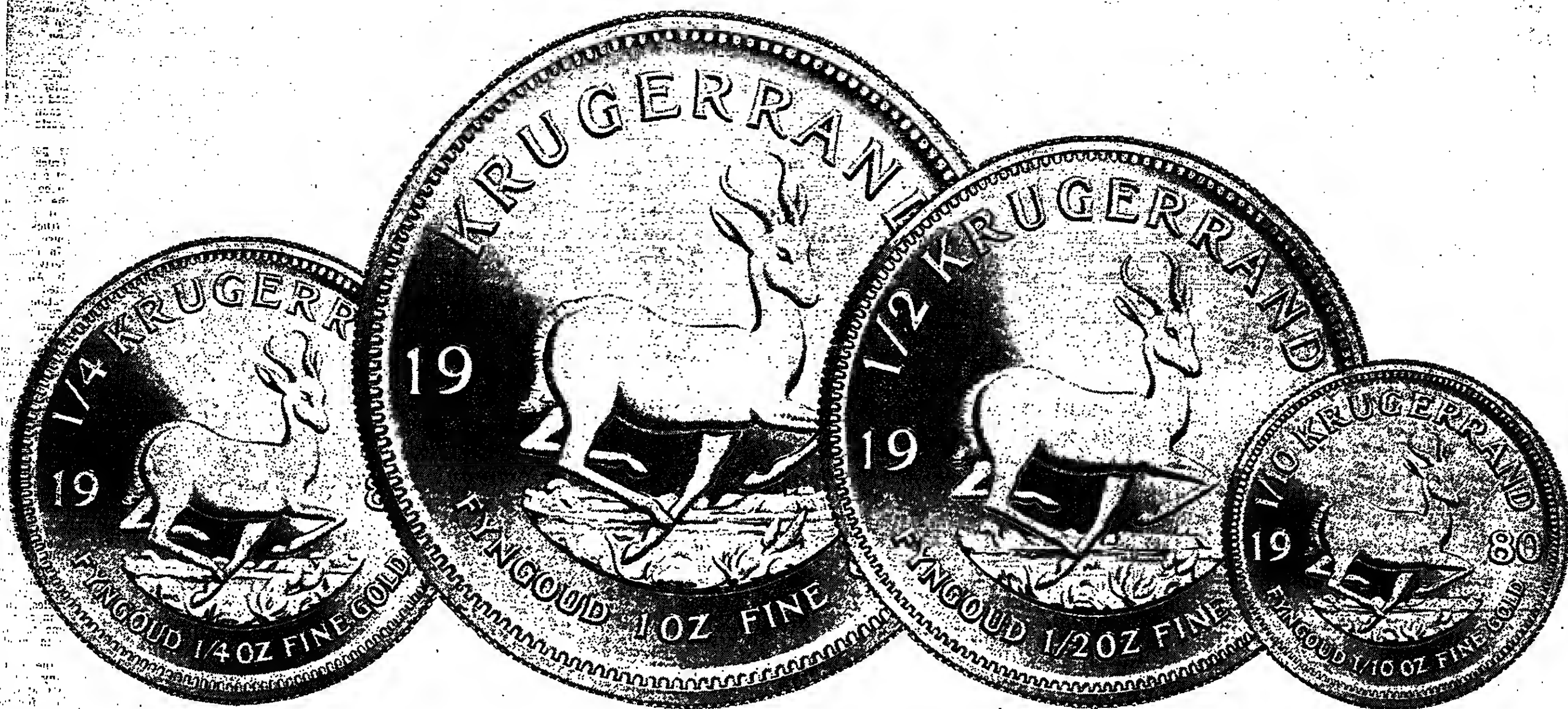
	Six months to 30th June 1980	1979	Year 1979
	£000	£000	£000
Sales	210,620	184,488	389,763
Consolidated trading profit before interest	11,662	12,604	19,655
Interest receivable/(payable) including £8-173m interest receivable in 1980 relating to prior years	664	(6,244)	(12,788)
Consolidated profit before taxation	12,326	6,360	6,867
Share of profits of associated companies	290	33	427
Profit before taxation	12,616	6,393	7,294
Taxation—United Kingdom	1,968	1,136	1,672
Overseas	641	1,064	1,296
	2,609	2,200	2,968
Profit after taxation	10,007	4,193	4,326
Minority shareholders' interest	(357)	(76)	385
Stockholders' profit before extraordinary items	9,650	4,117	4,711
Preference Dividends	198	198	395
Ordinary stockholders' profit before extraordinary items	9,452	3,919	4,316
Earnings per £1 Ordinary Stock before extraordinary items based on Stock in issue at 30th June 1980 prior to the increase to effect the Merger	21-6p	9-0p	9-9p

ROLLS-ROYCE MOTORS HOLDINGS LIMITED

Unaudited results for the 24 week period ended 14th June 1980

	24 weeks to 14th June 1980	16th June 1979	Year 1979
	£000	£000	£000
Sales			
Motor cars	47,697	46,343	96,131
Diesel engines	15,655	18,583	35,680
Other products	17,328	11,296	26,505
	80,680	76,222	158,316
Profit before interest			

مكنا من الذهب



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Now the Krugerrand is available in four exact gold weights, the original one ounce coin and also the new half, quarter and tenth ounce Krugerrands.

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Of course, market pressures may make its prices somewhat volatile in the

short-term. But if history is anything to go by, the long-term trend is for gold to hold its value, unlike many other forms of investment, which is why many investors see it as a hedge against inflation.

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And, because each Krugerrand contains an exact ounce of pure gold, or fraction thereof ($\frac{1}{2}$; $\frac{1}{4}$; $\frac{1}{10}$), you can always know the exact value of your investment by checking the gold price which is quoted daily, per ounce, in

most national newspapers.

The price you pay relates precisely to the gold price, plus a minimal premium to cover the cost of minting and distribution. And there is no VAT.

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If you would like an information leaflet, simply fill in the coupon below for a copy of "Gold Facts and the Krugerrand" which tells why Krugerrands represent a solid investment opportunity.

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LIMITED
LONDON**

In accordance with the provisions of the Certificates, notice is hereby given that for the six month Interest Period from 26th September, 1980 to 26th March, 1981, the Certificates will carry an Interest Rate of 13% per annum. The relevant Interest Payment Date will be 26th March, 1981.

Credit Suisse First Boston Limited
Agent Bank**Banco Union, C.A.**

(A Venezuelan Corporation)

Acting through its Panama Branch

U.S. \$35,000,000

NEGOTIABLE FLOATING RATE

CERTIFICATES OF DEPOSIT

MATURITY DATE 26 SEPTEMBER 1982/1984

In accordance with the provisions of the Certificates of Deposit notice is hereby given that for the six month Interest Period from September 26 1980 to March 26 1981 the Certificates will carry an Interest Rate of 13% per annum.

Agent
**FIRST CHICAGO
LIMITED**

NOTICE OF PURCHASE

EUROPEAN INVESTMENT BANK

Japanese Yen 15,000,000,000 7 1/2 per cent. Bonds due 1989

Notice is hereby given to Bondholders that during the eleven-month period commencing 1st October 1979, Yen 1,200,000,000 principal amount of such Bonds have been purchased in order to satisfy the first purchase fund redemption.

As of 1st September 1980 the principal amount of such Bonds remaining in circulation was Yen 13,800,000,000.

Luxembourg, September, 1980.

European Investment Bank.

This announcement appears as a matter of record only.

July 1980

**Industrie Pirelli S.p.A.**

Cheekye - Dunsmuir Transmission Project
British Columbia, Canada
525 kv Submarine Cable Project Financing

Can. \$55,000,000

Four year Loan

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Funds provided by
Credito Italiano, London
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Bank of Montreal

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Chemical Bank

Crédit Lyonnais

International Westminster Bank

Orion Bank Limited

Swiss Bank Corporation

This advertisement is issued in compliance with the requirements
of the Council of The Stock Exchange.**The Government of Zimbabwe
Issue of
Settlement Term Annuity 1981/88**

The Council of The Stock Exchange in London has admitted the above mentioned Annuity to the Official List. Particulars of the Annuity are available in the statistical service of Exel Statistical Services Limited. The Annuity is being issued by the Government of Zimbabwe under its Offers relating to Stocks issued in London by the Government of Southern Rhodesia. Copies of the Offer Document were despatched on 25th September, 1980 to Stockholders and those persons entitled to Initial Arrears of Interest.

Copies of the Offer Document and the Exel particulars card may be obtained during normal business hours on any weekday (Saturdays and public holidays excepted) up to and including 31st March, 1981 from:

Morgan Grenfell & Co. Limited
New Issue Department,
21 Austin Friars, London EC2N 2HB.

Copies may also be obtained from the Registrars of the Annuity:

Bank of England
New Issues and Redemption Office Counter,
3rd Floor, New Change, Watling Street, London EC4M 9AA

and from the Registrars of the Government of Southern Rhodesia 4 1/2
Inscribed Stock 1958/68:

Barclays Bank International Limited
Goodenough House, 33 Old Broad Street, London EC2P 2JE.

Companies and Markets

INTERNATIONAL COMPANIES and FINANCE**COMPETITION LIKELY TO HIT EARNINGS****Krupp begins to feel slowdown**

BY ROGER BOYES IN BONN

KRUPP, the West German steel, shipbuilding and engineering group, pushed up sales and orders during the first half of 1980 but it is beginning to feel the effect of the economic slowdown both at home and abroad. Sharper international competition is also likely to hit earnings this year.

The Krupp group announced yesterday that it booked orders of DM 7.2bn (\$4bn) in the first half, an increase of 8 per cent compared with the same period last year. Domestic orders rose 16 per cent but export orders plunged by 7 per cent.

The intense competition on international markets were taken at prices which little more than cover costs. Inevitably, this will affect profits, though the group gives no details, saying only that "negative factors are expected to be

stronger in the second half of 1980." Sales within the group rose by 9 per cent to DM 6.1bn for the first six months, however. This was principally because of 20 per cent growth in domestic business to DM 4.1bn, reflecting the generally healthy state of the German economy in the first half, the strong investment climate and a tendency for many sectors to stockpile.

However, the German economy has entered a slow-down—forecasters are reluctant to call it a recession—and this will probably have an effect on domestic sales in the coming year.

Export sales fell by 14 per cent to DM 1.4bn, although the sales of foreign subsidiaries rose by 14 per cent. Krupp's foreign subsidiaries also gave an important boost to the order books.

Krupp is widely diversified.

Its main interests now include steel, shipbuilding, plant manufacture, mechanical engineering and trading. However, some of the divisions are stuck in the middle of structural crises—steel and shipbuilding—while others are especially vulnerable to political and economic fluctuations abroad, such as the plant making division.

The overall effect is that Krupp is hit hard during times of global recession. Krupp's order figures are already beginning to show this. While orders for tonnage and quality steel showed a slight increase to the first half, special steels have been particularly badly affected by the flagging demand from the motor industry. Meanwhile, the cost of ore and fuel oil is soaring and prices are falling. Sales for the half rose 7 per cent to DM 3.2bn.

Similarly, in shipbuilding, business is lagging. Although

Weser booked three contracts for ship conversion, the prices obtained were below those needed to cover costs. Orders in the plantmaking division revealed a more encouraging trend, but they were still below last year's level.

The relatively strong Deutsche Mark (against the yen, for example), the fact that its competitors receive government export aid, the high German labour costs and above all the economic uncertainty in many key markets all took their toll.

Even the trading division was not immune from world events, losing significant steel exporting orders from Iran and China. However, these were adequately compensated by increased deliveries to India, Spain and Nigeria and, overall, the division enjoyed an above-average rise in demand, slowing a 40 per cent sales rise to DM 2bn.

**Jacorossi in
Malta talks**

By Geoffrey Grima in Valletta
JACOROSI, Italy's fuel distributing company which is 50 per cent owned by AGIP, is negotiating the setting up of a joint company with the Malta Government to run the former NATO refined fuel oil storage depot at Has Saptan.

Has Saptan, with a storage capacity of 250,000 cubic tons, is considered to be one of the major underground fuel stores in the Mediterranean. It was originally built by Britoil.

Negotiations held this week between senior Malta Government and Jacorossi officials were today described as very encouraging and it is now expected that the project could start operating before the end of the year.

The regular sale of such a substantial amount of fuel is expected to have a positive effect on the Maltese economy.

**Heavy losses force staff
cuts on Spanish airline**

BY ROBERT GRAHAM IN MAORIO

SPANTAX, Spain's biggest privately owned air charter company, is to make staff cuts and put others on short time to offset mounting losses. The cuts include pilots, cabin and auxiliary staff.

The company revealed that losses in the first six months of 1980 amounted to Pta 400m (\$5.7m). This compares with total 1979 losses of Pta 288m (\$4.1m).

The company, founded in 1958, has built up a fleet of 20

aircraft, both short- and long-haul, including a DC-10. It carries about 2m passengers a year and contributes about \$100m a year to the Spanish balance of payments.

The company's problems stem from increasingly high overheads, both personnel and fuel, and competition.

The company management has denied that it is seeking a form of absorption by the state and says it is determined to continue as a private company.

**Israeli paper
group higher**

By L. Daniel in Tel Aviv

AMERICAN-ISRAELI Paper Mills, whose shares are quoted in New York as well as in Tel Aviv, reports that its net profit in fiscal 1979-80 rose 15.38m (\$7.5m), an increase of 49 per cent. It will pay shareholders an unchanged cash dividend of 20 per cent and an unchanged stock dividend of 40 per cent.

During the past fiscal year, AIPM acquired two smaller paper products firms as a result of which its sales in the April to June period of 1980 increased by 18 per cent and its net profit by 180 per cent to \$17.1m.

AIPM is currently preparing to raise capital on the American Stock Exchange.

Meanwhile, Elscint, Israel's producer of tomographs (scanners) and other nuclear medical instrumentation, intends to market an additional 500,000 shares in the U.S. The \$10 shares currently being traded over the counter in the U.S. have risen in the past six months from \$11 to \$26 because of the success of the company's digital nuclear imaging cameras and scanners.

Receivership for Cefisa

BY OUR MADRID CORRESPONDENT

AN INVESTMENT company controlled by one of Spain's best known industrialists of the Franco era, Sr. Eduardo Barreiros, has applied for temporary receivership. The company, Cefisa, has disclosed to a Madrid court that it has outstanding debts of Pta 22.19bn

(\$31m) against assets of Pta 2.57m (\$3.2m). Cefisa is primarily concerned with investment in agriculture in the Canaries, Castilla and Andalusia. Sr. Barreiros, who established the company in 1965, is the principal shareholder, and recently put in some Pta 500m (\$7m) to aid Cefisa.

Maisons Phenix to expand U.S. links

BY OUR FINANCIAL STAFF

FRENCH housebuilder, Maisons Phenix, and U.S. Home Corporation, the U.S. housing group in which it has a major shareholding, plan to set up a joint construction subsidiary in the U.S. east.

Using housebuilding techniques perfected by Phenix, the new company is to be based in Florida, the State which, after Texas, is U.S. Home's largest single revenue earner.

If successful the co-operation between the two companies could extend to other areas of the U.S., as well as Latin America, Phenix said. U.S. Home currently operates in 114 cities and 16 States in the U.S.

Phenix, which is Europe's largest builder of prefabricated single family homes, has been pushing hard into foreign con-

struction in the past year or so. Until 1979 Phenix's foreign activities were practically nonexistent. It had two European subsidiaries, one in Spain and one in Belgium. But they only built a few dozen houses annually and the Spanish unit was "mothballed" last year because of poor market conditions there. Phenix recently set up a West German subsidiary.

The group is seeking to develop exports of the housing units produced by its Maisons Evolutives affiliate, notably to newly industrialised developing countries in the Middle East and Africa.

The stated aim of M. Gerard Rongea, the director general, is "to do for housing in France what General Motors did for the automobile in the U.S."

He recently told shareholders that foreign expansion would continue "either by associating ourselves with successful local firms, or setting up joint ventures or by exporting our products directly."

Phenix has expanded its market share in France in the last three years to 5.7 per cent from 5.1 per cent and is aiming eventually to attain 10 per cent by developing regional sales.

Phenix moved into the U.S. market earlier this year with the purchase of 17.5 per cent of U.S. Home for some \$40m. The two companies both operate in the lower end of their respective markets.

Specialising in what it describes as "one for one" construction, Phenix has a house selling price that tends to be

**First-half setback
leads Dutch trader
to revise forecast**

BY CHARLES SATCHELOR IN AMSTERDAM

A SHARP decline in operating profits for the first half of 1980 is reported by Deli, the Dutch trading group.

As a result profits for the whole of the year are expected to be lower, whereas earlier forecasts, from Deli had suggested a slight earnings gain for 1980.

Sales for the six months rose by 9 per cent to Fl 561m. Net profits showed a gain of 29 per cent at Fl 4m (\$2m) but this resulted almost exclusively from a halved tax bill and a fall in profits attributable to third parties.

Deli made a small loss on its wood trading activities as rising costs and interest charges put pressure on margins. Turnover rose slightly in the Benelux countries despite the building recession but fell sharply in the Far East and the U.S.

The tobacco division performed satisfactorily with the company ending its activities in Colombia and Paraguay. The tea and rubber sectors performed well but losses were incurred in coffee and oil seeds.

● Hagemeijer, the Dutch based

international trading company, returned to the black with a Fl 1.03m (\$500,000) net profit in the first half. In the corresponding period of 1979 it posted an adjusted loss of Fl 2.18m.

Hagemeijer said its operating result for the first half amounted to Fl 33.1m, up 16.1 per cent from Fl 28.5m a year earlier. It said that for comparative purposes, the 1979 figure has been adjusted, by the elimination of reorganisation costs amounting to Fl 4.7m, which were charged to the provision for reorganisation at the end of fiscal 1979.

Turnover in the first six months of 1980 rose by almost 17 per cent to Fl 537m from Fl 459m.

Net profit per share amounted to Fl 0.71 in the first half compared with an adjusted loss of Fl 1.49 a year earlier.

The trading company said that an exchange profit of Fl 500,000 (Fl 1.5m previously) was not included in the results.

Hagemeijer said the 1980 half year figures confirmed its "confidence in a gradual improvement of the results."

Swiss move by landesbank

BY JOHN WICKS IN ZURICH

BAKOLA (SCHWEIZ) is to open in Zurich next month as a fully-owned subsidiary of the German bank Badische Kommunalbank. Landesbank-Groenau. This will be the second Swiss operation by the bank, which already owns the finance subsidiary Fortisbanking and Finance.

The new company is to concentrate on portfolio management and consulting services on behalf of the bank's German clients. There are showing increasing interest in the use of Zurich as a Euro market centre, the bank stated.

Recently there has been increased interest in Switzerland on the part of German banks. There are still only few of them with a Zurich base, since the two countries have

an unwritten agreement not to "poach" on the territory of the other.

This, however, applies primarily to domestic business, which is virtually unaffected by such an operation as BAKOLA.

● Net new money raised on the Swiss capital market rose by a factor of more than three during the first six months of 1980. According to the capital bank report, net offers surged upwards to SwFr 6,250m from SwFr 2,040m during the opening half of 1979.

Domestic bonds led the way with growth of SwFr 2.1bn followed by foreign bonds which raised an extra SwFr 1.46bn. Equity issues raised an additional SwFr 737m.

**THE REGIONAL
GOVERNMENT OF TUSCANY
at the
BRITISH INTERNATIONAL
FOOTWEAR FAIR**

Fourteen Tuscan shoe manufacturers, sponsored by the regional government of Tuscany, will be exhibiting their spring and summer collections for 1981 at the British International Footwear Fair, Olympia, from 29th September to 1st October.

Montemario, Gian Marco and F.lli Francini will be showing men's top end and medium quality collections in kid and leather; Arno, Castuccio and Mimosa women's classic and sports collections; Fiorini women's shoes with sponge rubber soles; Tiglio Guelli and Rontani medium quality shoes for sport and leisure in leather, fabrics and plastic materials; Lega, Gioia, Fria and Solari sandals and shoes in kid, leather and synthetic materials and Benti, a range of home and bedroom slippers in synthetic materials.

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Redcliff project developer sought

By James Forth in Sydney

THE SOUTH AUSTRALIAN Government is seeking a major group to participate in the \$150m (US\$170m) Redcliff hydrochemical project after failing to convince Dow Chemical of the U.S. to commit itself to the venture.

The South Australian Premier, Mr. David Tonkin, travelled to Dow's Michigan headquarters after recent reports that the U.S. group would pull out of the venture. But Dow, which has been considering the Redcliff project for nine years, said that it was unable to make a decision for about two years.

Dow had the exclusive right to develop Redcliff, but this has now been removed by the South Australian Government.

Mr. Tonkin will visit Tokyo to talk to Japanese groups which have expressed interest in Redcliff. It is known to be one of the parties, and Sumitomo and Mitsubishi are reportedly also interested.

Mr. Tonkin said from Vancouver yesterday that Dow would continue with its interest, and would be welcomed. The U.S. group would continue its environmental studies to show good faith.

Dow had told him that it wanted to defer a decision on Redcliff because of the present world situation and the general recession.

EDR issue from Uny Company

By Our Financial Staff

UNY COMPANY, the Japanese retailer, plans to raise around \$35m (equivalent to some ¥2.5bn) through the issue of 9m shares of common stock represented by European Depositary Receipts (EDRs).

The proceeds of the issue will be used to expand operations in Japan, where new stores are to be opened. The date set for the issue is October 15, and the shares are expected to be priced at a discount of roughly 10 per cent on today's price on the Tokyo Stock Exchange. Last night the shares closed at ¥870 (about \$4) each.

The sale will take place in U.S. dollars through an international selling group, the lead manager in which is Nomura Europe and the other members Robert Fleming and Co., Lombard Odier International, and Tokai Kyowa Morgan Grenfell, which will together underwrite the issue. Citibank, N.A., will issue the EDRs, as the depositary, initially in the denomination of 10,000 shares. Uny's shares are quoted on the Tokyo and Nagoya stock exchanges.

ALLIED IRISH BANKS LIMITED
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Floating Rate Subordinated
Notes due 1984

In accordance with terms and conditions of the Floating Rate Subordinated Notes due 1984, the Rate of Interest for the interest period from 29th September, 1980 to 29th March, 1981 has been fixed at 13 1/4 per annum. The Coupon Amount of U.S. \$300,000 will be payable on 30th March, 1981 against surrender of Coupon No. 8.

26th September, 1980.
Manufacturers Hanover Limited
Agent Bank

Aviation division brings setback at Swire Pacific

BY OUR HONG KONG CORRESPONDENT

THE SWIRE PACIFIC group has reported half-year profits less than half last year's mid-term results and less than its portion of the interim profits turned in by one publicly quoted subsidiary, Swire Properties. Earnings for the six months to June 30 came to HK\$87.2m (US\$17.5m), compared with HK\$177.8m last year, although the dividend is maintained at 17 cents a share on the "A" shares and at 3.4 cents a share on the "B" shares.

Behind the results lie rising fuel and wage costs plaguing the subsidiary, Cathay Pacific Airways. Cathay's was hit in the second half of 1979, when oil prices shot up and severe foreign exchange losses arose from the strength in the foreign exchanges of the Japanese yen in which an estimated one-third of its revenues are denominated.

Those factors, combined with a slowdown in the growth of the

market, held the group's profits down in 1979 to HK\$327.9m, a less than 1 per cent increase from the previous year.

The group will not divulge exact figures on the performance of its divisions, but since Swire Properties alone brought it about HK\$92m in the first half, and since the aviation division was cited as the worst performer in that period, there are indications that the airline is now running in the red.

But Mr. John Bremridge, the chairman forecasts that earnings for the full year will still be "appreciably better" than last year. He predicts that Cathay Pacific's performance will improve, and notes that the group will net HK\$ 243m of the HK\$ 360m that Swire Properties is expected to turn in.

However, Cathay Pacific treats income from aircraft sales as recurrent earnings, not extraordinary gains. It has already sold one Lockheed 1011 TriStar

In the second half and hopes to put some of its older Boeing 707s up for sale.

Mr. Bremridge said he expects the two other divisions—industries, and shipping, and offshore services—to do better in the second half than they did in the first. Industries is plagued by sharp increases in sugar costs, recession in its major markets, and the failure of a chemical plant that the group was forced to write off because of seriously defective equipment.

In shipping and offshore services, two large crane ships were used less than expected and Hongkong United Dockyards is still operating in the red, although the losses are less than they were in the second half of 1979.

The entire group had suffered, Mr. Bremridge said, from high interest rates so far this year, and finance charges will continue to be a major cost in all operations.

Mid-term profits advance for HK and China Gas

BY OUR HONG KONG CORRESPONDENT

THE HONG KONG and China Gas Company has posted a 54 per cent increase in interim profits but has warned that higher wage and feedstock costs may force it to levy yet another rate increase on its gas supplies.

After-tax profits for the six months to June 30, came to HK\$21.15m (US\$4.5m) up from HK\$13.76m for the same period last year, and the second interim dividend was set at 21 cents a share, compared with 20 cents.

The company attributed the improvement to a 20 per cent

increase in gas sales during the period, a 32 per cent increase in customers served, and interest income from the proceeds of a HK\$92m rights issue raised in April to expand the company's plant.

But Mr. R. C. Lee, chairman, noted that the company's wage bill will rise by HK\$4m in the second half and that other steeply expanding expenses are cutting into the second half profits.

The company raised its gas rates last year after having held them steady since 1974.

South China Morning Post lifts payout

By Our Hong Kong Correspondent

THE SOUTH CHINA Morning Post, Hong Kong's leading English language daily, has reported profits for the year to June 30 of HK\$54.5m (US\$11m), up from HK\$44m for the previous year. The final dividend is HK\$1.40 a share, making a total of HK\$1.40, against HK\$1.10.

The shares are about 90 per cent held by three principal shareholders: Hongkong and Shanghai Banking Corporation; Hutchison Whampoa; and Dow Jones Inc.

Tan Chong doubles earnings

BY WONG SULONG IN KUALA LUMPUR

TAN CHONG, the assembler and distributor of Datsun cars in Malaysia and Singapore, doubled its earnings in the first half to June. Group pre-tax profits rose from 26m ringgit to 57m ringgit (US\$27m), on turnover up by 47 per cent to 275m ringgit (US\$131m). The after-tax profit was 29m ringgit, compared with 13.5m ringgit.

The sharp gains were made on the strength of the Malaysian car market. Tan Chong sales

in Malaysia rose from 129m ringgit to 215m ringgit. Sales at the Singapore end increased by only 1.5m ringgit to 59m ringgit, reflecting measures taken by the Singapore authorities to curb growth in the number of cars on the island.

Tan Chong also said it benefited from a generally stable yen exchange rate during the period. A surplus of over 82m ringgit was thrown up through the revaluation of the group's assets,

out of which 50m ringgit came from the revaluation of land and buildings of its two wholly-owned subsidiaries, and 32m ringgit from other subsidiaries. A one-for-one scrip issue is to be made, for which purpose a sum of 48m ringgit from this surplus is to be capitalised.

Tan Chong is paying an interim dividend of 10 cents per share, with directors promising a final 15 cent dividend on the enlarged capital.

Goodyear Malaysia plans further plant expansion

BY OUR KUALA LUMPUR CORRESPONDENT

GOODYEAR MALAYSIA Berhad is to spend U.S.\$25m over the next two years on expansion, including the installation of advanced facilities for radial truck tyre production. This expansion, coming on top of the recently completed U.S.\$16m extension to its plant at Shah Alam, outside Kuala Lumpur, brings to U.S.\$68m the amount invested on the plant since it first started in 1974.

Mr. I. B. Thomsen, president of Goodyear International, said that this represented the biggest single non-oil American investment in Malaysia.

Goodyear Malaysia is a joint venture, with Goodyear International holding 51 per cent of the equity and Pemas, the Malaysian Government-owned agency, holding 49 per cent.

The recent extension to the plant, which was declared opened by Datuk Hussein Onn, the Prime Minister, yesterday, will double production capacity to 51,000 kilos of rubber products per day. As a matter of policy, Goodyear does not disclose the number of tyres made, or its sales figures. The bulk of Goodyear Malaysia's production is for local consumption.

Shell Refining Malaysia downturn

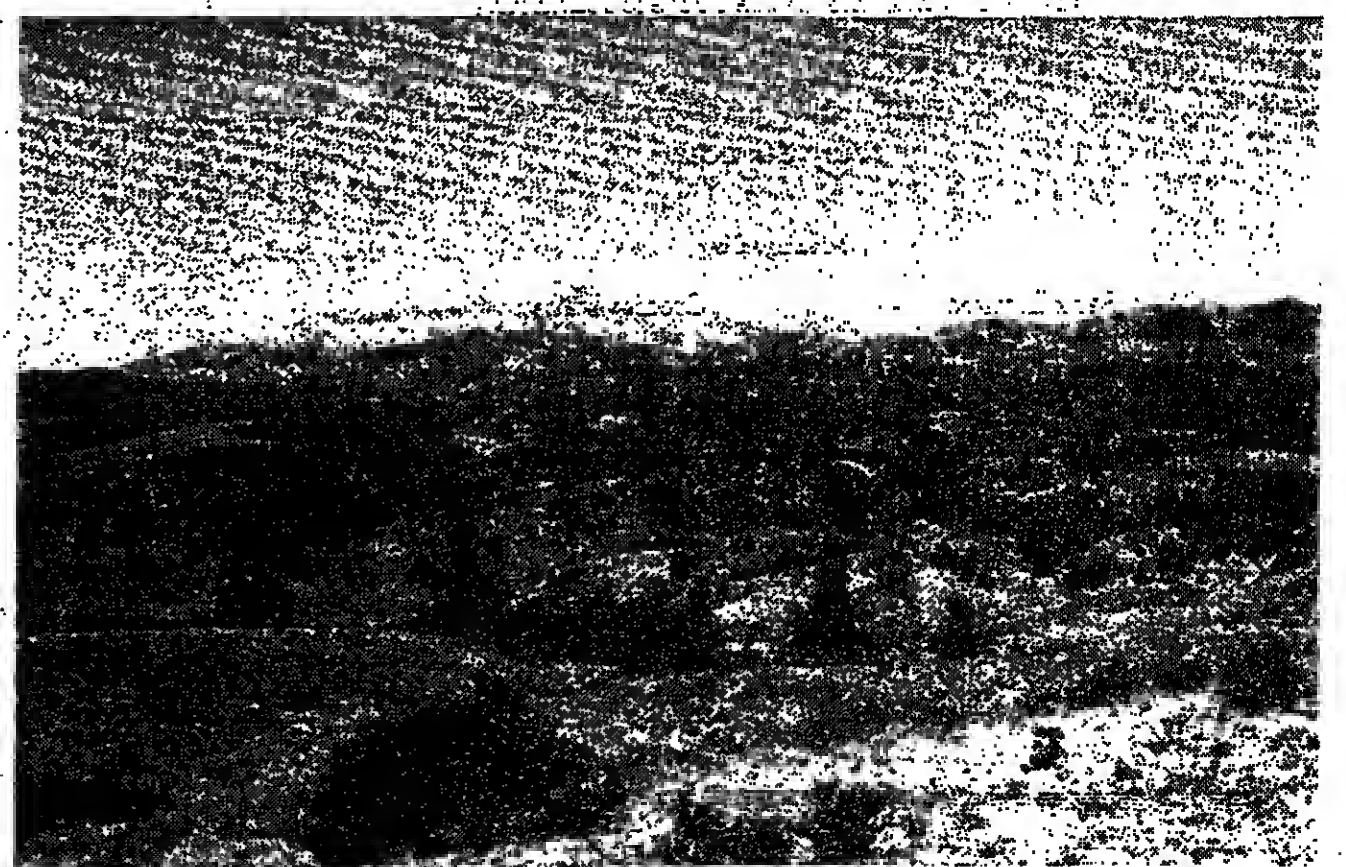
By Our Kuala Lumpur Correspondent

SHELL REFINING Company (Malaysia) suffered a fall of 12 per cent in its profit for the half-year to June, from 18.5m ringgit to 14.5m ringgit (US\$6.9m) on flat sales volume. The results are in line with those of the other Malaysian refiners, Esso Malaysia Berhad, which recently reported a drop in interim net profit from 12.6m ringgit to 8.1m ringgit. Both companies have blamed the sharp increase in crude oil prices, and their inability to get sufficient compensation from the market.

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Skandinaviska Enskilda Banken	Svenska Handelsbanken
Union Bank of Switzerland (Securities) Limited	S. G. Warburg & Co. Ltd.
Westdeutsche Landesbank Girozentrale	

The Notes, in the denomination of US\$5,000 each, with an issue price of 99 1/8 per cent, have been admitted to the Official List by the Council of The Stock Exchange, subject to the issue of the Temporary Note. Interest is payable annually in arrears on October 1, commencing on October 1, 1981.

Particulars of the Notes are available in the Extel Statistical Service and may be obtained during normal business hours on any weekday (Saturdays excepted) up to and including 10th October, 1980, from the broker to the issue:—

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APPOINTMENTS

L. Pincott to head Stone-Platt

Mr. Leslie R. Pincott is to succeed Sir Geoffrey Hawkins as chairman of STONE-PLATT INDUSTRIES, the last-making textile machinery group which had in seek bank support earlier this year after a technical default on a loan. He will take over the chair on November 1.

Mr. Pincott was a managing director of Esso Petroleum from 1970 to 1978. He is vice-chairman of Remploy and a director of George Wimpey and other companies. He has already joined the Board of Stone-Platt, which is closing its Oldham factory in September.

Mr. Pincott is a non-executive director. Sir Geoffrey, now in his late 60s, has been chairman since 1974.

Mr. E. G. Smalley, previously chief executive, who became deputy chairman in July 1979, will continue in that position. Mr. R. F. Taverne is chief executive.

Mr. George R. Jefferson has been appointed non-executive director of BARCOCK INTERNATIONAL. Mr. Jefferson is chairman designate of British Telecom.

Mr. Derek Alun-Jones has been appointed chairman of the ELECTRONIC CAPITAL EQUIPMENT SECTOR WORKING PARTY of the National Economic Development Council. The working party was formed by the NEDC in May 1980 to concentrate on the major opportunities and threats facing the capital electronics industry in the face of rapid technical change and intense overseas competition. It succeeds the Radio Communications, Radar and Navigation Aids SWP and the Automation and Instrumentation SWP. Mr. Alun-Jones is managing director of Ferranti.

Mr. R. Banner has been appointed an executive director of WILLIS FABER and DUMAS (UK), the firm Mr. Banner as reported yesterday.

Mr. Christopher Morgan has been appointed by the Bureau National du Cognac, the industry's governing body, as director of the COGNAC INFORMATION CENTRE FOR GREAT BRITAIN. The centre will operate from 130 Crownwell Road, London, SW7 and offers a receptive service to the public and the catering trade (Telephone 01-373 6825).

Mr. A. D. Porter has been appointed chairman of F. H. TOMKINS following the retirement of Mr. Gerald C. Garman, who has been with the group for 50 years.

Mr. J. M. R. MacMillan has been appointed executive chairman and joint managing director of D. S. CRAWFORD, a subsidiary of the United Biscuits group. Mr. J. F. Gilson has also been appointed joint managing director of D. S. CRAWFORD. Mr. MacMillan is a director of UNITED BISCUITS (Holdings).

Mr. Ole Haug has been named manager of Crude Oil Tanker Chartering for the GOTAAS-LARSEN group and he will be based in London. He succeeds Mr. Stephen J. Stapleton, vice president of the company, who

and of United Biscuits (UK) has been managing director of D. S. CRAWFORD since 1963. Mr. Gilson, a United Biscuits (UK) director, continues as managing director of United Biscuits (Agriculture).

Mr. Robert D. Walter has been elected senior vice president, finance, and Mr. Brian D. McAnley, controller, of NORTON SIMON INC.

ROBERT M. DOUGLAS HOLDINGS states that Sir Robert Douglas, founder of Douglas Group, who retired as chairman two years ago, is to be created president of the company. On November 24, 1980, the group will have been in existence for 50 years.

ANGLO OVERSEAS TRANSPORT, part of P and O Agency Services, is to divide its operations into two separate units, Anglo Overseas and Anglo Specialist Services, from October 1. Mr. Joe Powell, deputy executive chairman of Anglo Overseas Group, becomes chief executive of Specialist Services. Mr. John James, formerly deputy managing director of Anglo Overseas Transport, will be managing director of Anglo Overseas.

Mr. Daniel Cardon de Lichtbuer has been appointed chairman and Mr. David McWilliam, chief executive, of EURO TRAVELLERS CHEQUE INTERNATIONAL, the central company of the new worldwide organisation based on Thomas Cook's travellers' cheque operation. Mr. Cardon de Lichtbuer is managing director of European travellers' cheques.

Mr. David McWilliam

Mr. Cardon de Lichtbuer is a member of the executive committee of Banque Bruxelles Lambert. Mr. McWilliam has been seconded from Midland Bank International, where he is an assistant general manager. He is a former managing director of Thomas Cook Bankers.

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continues in charge of dry bulk cargo chartering and in charge of the Gotaas-Larsen office in New York.

Mr. G. W. K. Fenn-Smith and Mr. P. G. Kirtin, members of the executive staff of ADVANCE SERVICES, have been appointed directors of the company.

Mr. Martin W. T. Harrison has taken a major shareholding in MOLNERS, of Sutton Coldfield, and he becomes chairman and managing director. Sir Parkinson continues as sales director and Mr. Bill Parkinson, who founded the company in 1973, remains a director on a consultancy service agreement.

Mr. John Simmonds has been appointed managing director of PEARL and DEAN GROUP. He was previously with Letraset International as general manager of hith Letraset UK and its consumer division and latterly as group development manager.

BSG INTERNATIONAL has appointed Mr. Peter Johnson as managing director for its main Ford dealership handling the Bromley and Beckenham areas of Kent.

The first British trading company to be totally acquired by the Kuwait Investment Office, the PROPERTIES OF FAY'S WHARF, has appointed a new chairman of the Oils and Chemicals Division, Mr. D. J. W. Browne.

WILLIAMS AND GLYN'S BANK has made the following appointments: Mr. W. J. A. Deacon, assistant chief executive; Mr. H. E. Farley, executive director, domestic banking; Mr. G. E. K. Foster, executive director responsible for related services; and Mr. A. G. Palford, executive director, international banking.

Mr. Brian L. Mower has been appointed head of information for the DEPARTMENT OF



Mr. Leslie Pincott

EMPLOYMENT following the retirement of Mr. Dick Seaman. Mr. Mower is at present deputy head of information at the Treasury. He will take up his new appointment shortly.

Mr. J. B. Knights, general manager of the ROYAL LONDON MUTUAL INSURANCE SOCIETY, has been appointed a director. Mr. L. E. Cooke has joined the society as a non-executive director and consultant. Mr. Cooke is a former director and general manager of National Westminster Bank.

ALCAN ALUMINIUM (UK) has made the following appointments: Mr. F. J. Davies to head the extrusion division and he will also become chief executive officer of Alcan Extrusions. Within the extrusion division, Mr. A. E. Petersen will be commercial director and Mr. R. Welsh, general manager extrusion product companies and managing director of Alcan Windows. Mr. J. P. Kembery is now managing director of Alcan Metal Centres, replacing Mr. M. L. Bell, who is moving to a senior position in Montreal.

Mr. J. B. T. Wilson takes over the position of managing director, Alcan Wire.

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CURRENCIES, MONEY and GOLD

£ and \$ quiet

Trading in currency markets lost momentum yesterday as the lack of fresh developments over the Iran/Iraq conflict increased market uncertainty. Operators were unwilling to commit themselves one way or the other, with the end of the month approaching, most major currencies drifted in a rather trendless market.

Sterling's trade-weighted index showed a slight fall to 76.1 from 76.3, having stood at 76.3 at noon and in the morning. Against the dollar it opened at \$2.4025-2.4030, and ended at around \$2.4030.

The dollar closed slightly higher at the day's end, with a rally out of New York pushing it just above the day's low at the end of the day. Against the D-mark it finished at DM 1.7980 compared with DM 1.7945 on Wednesday, and Swf 1.6440 in terms of the Swiss franc.

The yen was also slightly firmer against the Japanese yen at ¥214.70 from ¥214.50 on Wednesday. According to Bank of England figures, the dollar's trade-weighted index eased slightly to 80.5 from 80.8, which did not reflect the dollar's late improvement.

D-MARK—One of the weaker members of the European Monetary System, and unsettled just recently by Middle East unrest, falling to a four-year low against the dollar, the D-mark was unchanged on balance at yesterday's fixing in Frankfurt, losing ground to the French franc, Dutch guilder and Swiss franc, but improving in sterling. The French franc rose

to DM 43.07 per FF 100 from DM 43.03, the Dutch guilder to DM 32.05 per FF 100 from DM 31.95, and the Swiss franc to DM 1.0595 from DM 1.0587. On the other hand sterling slipped to DM 4.3220 compared with DM 4.3300 on Wednesday, and the dollar was lower at DM 1.8002 against DM 1.8006. Trading was generally quiet, with dealers even more reluctant than usual to take on new positions ahead of the month end, in view of current Middle East uncertainty.

DANISH KRONE—Remaining quite firm around the middle of the following two developments in 1979. The Danish krone was mostly firmer at yesterday's fixing in Copenhagen, with sterling lower at Dkr 13.3755, compared with Dkr 13.4370, and the U.S. dollar slipping to Dkr 5.5740 from Dkr 5.5885. The Dkr 3.0070 from Dkr 3.0080. Dealers pointed out that pressure on the Danish krone, seen in the past, seems to have disappeared for the time being, since the D-mark is fairly quiet within the EMS. But market sources were quick to point out that any sustained rise by the D-mark could lead to the possibility of another devaluation in the krone.

JAPANESE YEN—Still firmer than a month ago having been helped by the past weakness of the dollar and a fundamental improvement in the Japanese economy. Just recently however, fears over disruption of oil from the Middle East have seen the yen weaker. The yen was firmer against the dollar, closing yesterday, with the U.S. unit closing at ¥215.55, compared with ¥215.20 on Wednesday. It opened at ¥216.20 and traded within a fairly narrow range as the market adopted a more cautious attitude on events in the Iran/Iraq conflict.

EMS EUROPEAN CURRENCY UNIT RATES

	ECU central rates	Currency amounts	% change from central rate	% change from divergence	Divergence limit %
Belgian Franc	36.7887	40.0887	+2.06	+0.74	+1.13
Danish Krone	7.4603	7.4603	0.00	0.00	0.00
German D-Mark	2.4536	2.4536	0.00	0.00	0.00
French Franc	6.5455	5.9340	-0.92	-0.70	-1.26
Italian Lira	2.7432	2.7432	0.00	0.00	0.00
Portuguese Escudo	204.80	204.80	0.00	0.00	0.00
Spanish Peseta	166.64	166.64	0.00	0.00	0.00
Swiss Franc	2.0	2.0	0.00	0.00	0.00
U.S. Dollar	1.936	1.936	0.00	0.00	0.00

Changes are for ECU, therefore positive change denotes a weak currency. * Adjustment calculated by Financial Times.

EXCHANGE CROSS RATES

	Sept. 20	Sept. 21	Sept. 22	Sept. 23	Sept. 24	Sept. 25	Sept. 26
Pound Sterling	1.00	1.00	1.00	1.00	1.00	1.00	1.00
U.S. Dollar	1.936	1.936	1.936	1.936	1.936	1.936	1.936
Deutsche Mark	3.375	3.375	3.375	3.375	3.375	3.375	3.375
Japanese Yen	215.5	215.5	215.5	215.5	215.5	215.5	215.5
French Franc	6.545	6.545	6.545	6.545	6.545	6.545	6.545
Swiss Franc	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Dutch Guilder	3.603	3.603	3.603	3.603	3.603	3.603	3.603
Italian Lira	2.036	2.036	2.036	2.036	2.036	2.036	2.036
Canadian Dollar	0.70	0.70	0.70	0.70	0.70	0.70	0.70
Belgian Franc	36.788	36.788	36.788	36.788	36.788	36.788	36.788

FT LONDON INTERBANK FIXING (11.00 a.m. SEPTEMBER 25)

3 months U.S. dollars		6 months U.S. dollars	
bid 18 1/4	offer 18 1/2	bid 18 1/4	offer 18 1/2

EURO-CURRENCY INTEREST RATES (Market Closing Rates)

	Sept. 25	Sterling	U.S. Dollar	Canadian Dollar	Dutch Guilder	Swiss Franc	West German Mark	French Franc	Italian Lira	Australian Dollar	Japanese Yen
Short term	16.10	11.11	8.9	9.4	1.4	8.4	11.11	11.11	14.37	5.14	16.10
7 days notice	16.10	11.11	8.9	9.4	1.4	8.4	11.11	11.11	14.37	5.14	16.10
Month	16.10	11.11	8.9	9.4	1.4	8.4	11.11	11.11	14.37	5.14	16.10
Three months	16.10	11.11	8.9	9.4	1.4	8.4	11.11	11.11	14.37	5.14	16.10
Six months	16.10	11.11	8.9	9.4	1.4	8.4	11.11	11.11	14.37	5.14	16.10
One Year	16.10	11.11	8.9	9.4	1.4	8.4	11.11	11.11	14.37	5.14	16.10

Long-term Eurodollar rates: two years 12-12 1/2 per cent; three years 12-12 1/2 per cent; four years 12-12 1/2 per cent; five years 12-12 1/2 per cent; six years 12-12 1/2 per cent; seven years 12-12 1/2 per cent; eight years 12-12 1/2 per cent; nine years 12-12 1/2 per cent; ten years 12-12 1/2 per cent.

Short-term rates are call for sterling, U.S. dollars, Canadian dollars and Japanese yen; others two days' notice. Asian rates are clearing rates in Singapore.

The following clearing rates were quoted for London dollar certificates of deposit: one-month 11.45-11.55 per cent; three-month 12.00-12.10 per cent; six-month 12.30-12.40 per cent; one-year 12.10-12.20 per cent.

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Long-term Eurodollar rates: two years

APPOINTMENTS

General Manager
-Property-

c. £13,000 + Car Sheffield

Whitbread East Pennines Limited, part of the leading brewing group, have properties situated throughout the East of England, from Leicester to the Scottish border, valued in excess of £50 million. We are looking for a highly professional and creative man or woman to be responsible for all aspects of property management for the Company.

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Candidates, preferably in the 30 to 40 age range, should be educated to degree level and ideally hold a relevant professional qualification. Previous experience of property development and project evaluation is essential, though this need not have been in the licensed trade.

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Please write or telephone for an application form to: Pauline Pryor, Recruitment Administrator, Whitbread & Company Limited, Chiswell Street, London EC1Y 4SD. Telephone: 01-606 4455. Please quote reference EP/3.

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Margaret Smith 0271 0271

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BUSINESSES FOR SALE

ELECTRONICS
COMPANY
FOR SALE

Purchase sought for well established, medium sized electronics company with own production range of high reputation which requires additional capital to exploit market potential.

Write Box G6580, Financial Times, 10 Cannon Street, EC4A 4BY

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TIMBER IMPORT AGENCY
IN HAMBURG/GERMANY

Main business: Sales of American Canadian soft- and hardwood timber, plywood, logs, etc. Manufactured wood products, well introduced on the German market. Suitable for foreign investment. Will be sold on own registration.

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OPPORTUNITY IN SHETLAND

North Sea Supplies Company wishes to dispose of its Larkhall operation. Apart from the fish shop with stocks of herring and salmon, supplies, tools and electrical equipment, etc., there is a business in contracting, industrial and domestic plumbing and heating services. Turnover is about £300,000 per annum. The site is capable of further expansion but the business is currently not profitable.

Please write Box G6558, Financial Times, 10 Cannon Street, EC4A 4BY

SPECIALIST CONTROLLED
ATMOSPHERE BRAZING
SUB-CONTRACTOR

In Midlands. Excellent property and assets. Opportunity to acquire well established company at realistic value.

Write Box G6546, Financial Times, 10 Cannon Street, EC4A 4BY

Midlands based Privately
owned Engineering Equipment
Supply & Maintenance Co.

Turnover £200,000 p.a. pre-tax profit approx £20,000. Unusual situation. Well established management will continue to be required. Please write to Box G6547 for further details.

Financial Times, 10 Cannon Street, EC4A 4BY

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Specialist Agents in the
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Write Box G6539, Financial Times, 10 Cannon Street, EC4A 4BY

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CONTRACTING BUSINESS
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Midlands Area. Excellent regular contract work. Freehold premises. Apply for confidentialities to: Box G6524, Financial Times, 10 Cannon Street, EC4A 4BY

COMPANY
FOR SALE

Service company with profits at £200,000. Enjoying a market leadership position with excellent growth prospects. £1 million. Principals only please.

Write Box G6525, Financial Times, 10 Cannon Street, EC4A 4BY

ESTABLISHED
PRODUCT RANGE
FOR SALE

Showing £80/100,000 Turnover with good gross margin. Suitable for expansion. Write Box G6522, Financial Times, 10 Cannon Street, EC4A 4BY

CENTRAL LONDON
Specialised and highly regarded
service business with excellent
staff. T.O. approx £100,000. Net
profits about £20,000 annually.
rising. Available only due to
principals' retirement. Attractive
leasehold premises and well-established
concern.

Write Box G6521, Financial Times, 10 Cannon Street, EC4A 4BY

IMPORTANT MAGAZINE
PUBLICATION
FOR SALE AS A
GOING CONCERN

Turnover in excess of £1 million. Principals only. Write Box G6526, Financial Times, 10 Cannon Street, EC4A 4BY

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For Sale. Manufacturing light clothing in North West. Single storey building, 15,000 sq ft. 100 Machinists.

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FOOD DISTRIBUTION. Profitable
specialised company. T.O. £150,000. Located
London. 0925 22302.GENERAL JOINERY & TIMBER ENGINEERING
BUSINESS FOR SALE

The business, which operates from a 10-acre site on the outskirts of Hull, holds a strong market position in this area of the North-East with a sales turnover of approximately £3.5 million per annum.

The skilled workforce numbers around 200 employees and the business is offered for sale as a going concern.

Please apply:-

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Management and trained staff

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Previously used for heat transfer and general packaging printing. Assets included:

74" Strachan & Hanshaw 5-colour common impression press. 88" Strachan & Hanshaw 2-colour flexographic press and ancillary equipment. Leasehold factory also available.

Contact M. J. G. Grant or S. W. Dillay, Splice and Pegler, 1st Floor, Quana House, 69-71 Queen Square, Bristol, BS1 4AE. Telephone Bristol 214741.

Lithographic Reproduction Company

Central London—well established company with reputation for high quality work.

Leasehold, 6,000 sq. ft. works, modern plant and equipment including step and repeat machine and scanner, excellent workforce. Please telephone 01-831 7130 ext. 600 Monday to Friday.

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Whatever type of business you want to buy or sell, when you present a sound proposition, you can depend on a good response from our readers. Just one warning: Businesses For Sale/Wanted are advertised every FRIDAY in the Financial Times, but not for long, the responses they receive see to that.

INTERESTED?

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THE PROMENADE, LLANDUDNO, NORTH WALES. 104 bedrooms, 4 bars, restaurant, 2 billiards. Turnover £200,000. £150,000 plus stock.

WOODLANDS HOTEL

WELLINGTON ROAD, TIMPERLEY, CHESHIRE. 38 bedrooms, luxurious function room, French restaurant, 5 busy bars. Turnover £400,000.

Offers over £450,000 plus stock for immediate sale. All enquiries to A. R. Labadie, Woodlands Hotel, 061-941 3926

BUSINESSES WANTED

WANTED
CONFIRMING HOUSE.

Old established UK company now part of a group financed from Middle East wishes to acquire profitable Confirming House with broad spread of overseas clients. Continuity of management preferred and funds are available to expand existing business. Minimum turnover region of £5m-£10m.

Reply in confidence in first instance to: Box G6545, Financial Times, 10 Cannon Street, EC4A 4BY

ARE YOU SUPPLYING THE BUILDING
OR MANUFACTURING INDUSTRIES?

A Group of Chemical Companies wish to expand their operation in these fields and are seeking to purchase small manufacturing companies for cash. Send details in confidence to:

Box G6550, Financial Times, 10 Cannon Street, EC4A 4BY

COMPANY ACQUISITIONS

Offshore investment company seeks acquisitions of companies with substantial PROPERTY OR FIXED OR LIQUID ASSETS

Straight cash deals preferred with no retained minority holdings, no share for share exchanges and no continuing directorships. Replies in strictest confidence to: The Chairman, Box G6401, Financial Times, 10 Cannon Street, EC4A 4BY

IMPORT/EXPORT
COMPANY REQUIRED

Price range £3 million to £5 million - Principals only. Write Box G6541, Financial Times, 10 Cannon Street, EC4A 4BY

WANTED

Small or medium-sized company manufacturing specialised clothing or footwear to M.O.D. standards. Continuity of present management preferable. Please write to Box G6530, Financial Times, 10 Cannon Street, EC4A 4BY

A MEDIUM SIZED
EAST ANGLIAN-BASED
ENGINEERING GROUP

has cash available for injection into suitable manufacturing companies of substance or in acquiring such companies from existing principals on the basis of continued operation. Companies with a turnover of up to £1m per annum are unlikely to be of interest.

The Group's main interests currently lie in the manufacture and marketing of all types of heating, refrigeration, air conditioning and catering equipment but the Group is interested in expanding this base to other manufacturing activities. If the above proposal is of interest to you please write to strictest confidence to:

Box G6549, Financial Times, 10 Cannon Street, EC4A 4BY

Manufacturer of
Accommodation Units for Sale

Turnover amounts to approx. £2.4 million per annum. Customers consist of large companies, schools and local authorities with some export content.

The business, which is situated on a freehold site in the county of Humberside, employs around 50 persons and is offered for sale as a going concern.

Please apply:-

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FOR SALE

Light Metal Pressing and
Fabrication Company

— West Midlands —

Turnover over £2m. Net Assets £350,000.

Freehold Manufacturing Site.

Profitable. Continuity of Management available.

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Retirement places on the market progressive established London
MOTOR PARTS & ACCESSORIES STORE

On Freehold site over 7,400 square feet. Only 5 miles South West of Piccadilly.

★ TURNOVER 1979 — £340,000 (increasing)

★ FREEHOLDS VALUED AT £275,000

★ STOCKS AT OVER £45,000 (cost)

Exceptional potential for expansion exists and substantial offers will be looked for. Our Chairman will only reply to direct decision makers who identify themselves and their interest. Write Box G6455, Financial Times, 10 Cannon Street, EC4A 4BY

PLANT AND MACHINERY

SALE BY AUCTION
9 October LARGE CAPACITY
& OTHER MACHINE TOOLS

By Order of H. W. E. Thompson and J. Cheetham, Joint Receivers and Managers of Trafalgar Engineering Ltd. AN IMPORTANT SALE OF LARGE CAPACITY & OTHER MACHINE TOOLS INCLUDING:

Horizontal and Vertical Bore up to 19 in diameter including: Richards 10 ft vertical and Union 8 ft 12 in horizontal. Richards 8 ft 6 in vertical and 11 ft vertical. 1955. Axiomatic 8 ft x 6 ft powered rotary table. radial cutting machines up to 6 ft. 12 ft diameter Facing Lathe. Plane-Mills with 4 ft 6 in head and capacity to 23 ft x 9 ft. Churchill 12515 Gear Hobber (1955). Hecker Thread gear Spine Miller with 54 in bed (1978). Cast Lathe with capacity to 48" swing x 25 ft. b.c. Tool crib equipment. Fabricating equipment including plate marking-out, profile cutting, welding, etc.

To be held on Thursday, 9th October, 1980.

For further details contact the Auctioneers.

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CHARTERED SURVEYORS
021-236 8236AIRCRAFT
FOR SALEENSTROM F28A
HELICOPTER

658 hours, excellent condition

£32,000. Ideal to learn, full

tuition and advice available

Ring Mrs. J. M. Lomas

on 061-308 3731

CHIPBOARD
MANUFACTURING PLANT

BUILT 1958, CAPACITY 36,000 MS PER ANNUM. BOARD SIZE 3600 mm x 1730 mm x 12/22 mm.

COMPRISING: 10 Daylight B.V.H. Press. Schenck Spreaders. Auto Feeders, etc.

Finishing Line. Stainman DVS Sanders and Schwabedissen. Saws complete with Provensir. Piping System. Seen working to Mid-October 1980. Offers:

C. T. White.

WEYROC LIMITED, Tel. Weybridge 45599

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Group seeking expansion currently established with world wide marketing of Marine Equipment and Industrial Corrosion Protection Equipment seeks new products in similar or allied fields. Cash available for investment in existing businesses or development of new products.

Principals only write to: Box G6554, Financial Times, 10 Cannon Street, EC4A 4BY

CORRUGATED
CARBOARD BOX

Investors interested in a quick

purchase of small to medium

size manufacturing unit

Write Box G6522, Financial Times

10 Cannon Street, EC4A 4BY

OLD ESTABLISHED
COMPANY

In Men's and Boys' Wear now developing into Mail Order would be interested in acquiring an established company already trading in this field. Principals should write to: Box G6554, Financial Times, 10 Cannon Street, EC4A 4BY. Strict Confidentiality Assured.

ABOVE AVERAGE PRICE

To be paid for an expanding business currently earning between £200,000 and £1,000,000 p.a. by a successful public company.

Please contact The Chairman, Box G6510, Financial Times, 10 Cannon Street, EC4A 4BY or telephone 01-278 9635 to arrange a confidential meeting

Printing & Packaging Companies
sought for Acquisition

Medium-sized Public Company seeking to expand by acquisition has funds available to acquire companies with profits over £50,000 per annum, in the West Midlands. Write in confidence to:

Box G6518, Financial Times, 10 Cannon Street, EC4A 4BY

Engineering Company Wanted

Private group wishes to buy an additional small manufacturing business located in the West Midlands area. Any proposition considered. Principals or their accountants should contact the Director in strict confidence at:

Box G6555, Financial Times, 10 Cannon Street, EC4A 4BY

BINGO CLUBS

Independent seeks to purchase above. Would

Companies and Markets

WORLD STOCK MARKETS

Heavy early trading on Wall St.

NEW YORK Stock table with columns for Stock, Sept 24, and Sept 25. Includes companies like AGF Industries, AMF, AM Int, etc.

NEW YORK Stock table with columns for Stock, Sept 24, and Sept 25. Includes companies like Alcoa, Amal Sugar, Amstar, etc.

NEW YORK Stock table with columns for Stock, Sept 24, and Sept 25. Includes companies like Amstar, Amstar, Amstar, etc.

NEW YORK Stock table with columns for Stock, Sept 24, and Sept 25. Includes companies like Amstar, Amstar, Amstar, etc.

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NEW YORK Stock table with columns for Stock, Sept 24, and Sept 25. Includes companies like Amstar, Amstar, Amstar, etc.

FOLLOWING the mixed tone to Wednesday's trading on Wall Street, stocks turned marginally lower by mid-session in heavy trading yesterday.

The market had been firm through much of the morning and at 11 pm the Dow Jones Industrial Average was up 3.16 to 957.82.

After the close on Wednesday, the company said directors approved plans to sell assets with a book value of \$84m and a market value of \$800m.

Active Xerox gained 3 1/2 to \$87. General Motors 3 1/2 to \$54.4, U.S. Steel 3 1/2 to \$22.1, Exxon 3 1/2 to \$70.1, Procter and Gamble 3 1/2 to \$54.4.

Closing prices for North America were not available for this edition.

THE AMERICAN SE Market Value Index slipped 1.14 to 346.35 on volume of 4.67m shares (3.15m).

Canada In contrast to the broad advance on Wednesday afternoon, the Toronto market turned lower early yesterday.

Some Defence-related issues also firmed. But Oils, numerous Metals and Coals closed lower.

Hong Kong Share prices closed lower on widespread profit-taking in sub-ward trading yesterday.

Paris In a reflection of Wall Street's steadiness on Wednesday, Paris stocks were steady to firmer in moderate trading yesterday.

Amsterdam Share prices closed mixed to higher with Royal Dutch up 1 1/2 to \$1.80 and Unilever gaining 1 1/2 to \$1.20.

Singapore Shares narrowly outnumbered losses yesterday in active trading, and the market closed mixed.

South Africa Shares were generally firmer with General, Basagel, Central and others among leading issues.

Financial Times US\$93.91 (Discount of 20%)

Indices

NEW YORK DOW JONES table with columns for Index, Sept 24, and Sept 25.

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GERMANY

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ITALY

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NETHERLANDS

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AUSTRALIA

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NEW ZEALAND

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PHILIPPINES

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THAILAND

THAILAND table with columns for Stock, Sept 24, and Sept 25.

VIETNAM

VIETNAM table with columns for Stock, Sept 24, and Sept 25.

Companies and Markets

Producers meet as coffee falls

By Our Commodities Staff

COFFEE producers were meeting until late last night in London to try to hammer out an agreement on export quotas which might pave the way for agreement between them and the main consumer nations at the International Coffee Organisation meeting.

Meanwhile prices on the London terminal market again fell to new four-year lows. November robusta futures fell by another £12.5 to close at £103.5 a tonne.

The ICO council has set up a contact group of four producers and four consumer countries which will meet this morning to work on whatever proposals the producers have been able to reach. ICO delegates said that the advantage of a contact group would be its ability to concentrate on the technical details of introducing export quotas.

Until yesterday the two sides had been talking for the best part of two weeks without much sign of agreement. If the talks do look like coming to some point they may be continued into the weekend.

Market apple changes urged

MEASURES to help British apple growers cope with competition from imports, notably French Golden Delicious, are being put to the European Parliament by David Curry, Conservative Euro-MP for Essex.

Mr. Curry is calling for changes in the way the Common Market regulates the apple industry. He wants a tighter system of grading apples to prevent poor quality fruit being dumped on domestic markets. The best apples are reserved for exports, and a limitation in shipments of Grade 1 apples to the U.K. for a transitional period to help English growers recapture some of their domestic market.

Mr. Curry also proposes changes in the way the intervention support buying system works so that it does not favour so heavily southern European producers with apple yields twice as big as Britain's.

He is demanding as well an investigation by the EEC Commission of national aids given by individual governments to apple growers. Mr. Curry claimed that he was seeking to gain time for the tremendous efforts English growers were making to put their own house in order.

Copper market under pressure

By JOHN EDWARDS, COMMODITIES EDITOR

COPPER prices fell back sharply on the London Metal Exchange yesterday losing most of the gains earlier this week. Cash wirebars closed £17 down at £880 a tonne.

The market was depressed by the decline in gold and silver, and news from the U.S. that Inspiration Consolidated Copper, one of the smaller producers, had reached a tentative settlement with the unions to end the 12-week old strike by its workers. It is thought that Duval Copper, whose labour contracts expire on September 30 will also reach an agreement over the weekend similar to the terms negotiated by Kennecott. These further settlements are expected to increase pressure on the bigger producers to renew negotiations seeking an end to the stoppage.

Meanwhile Noranda announced it was cutting its U.S. copper selling price by 3 cents to \$1.01 a lb.

Other metals came under selling pressure, but losses were slight in quiet trading conditions.

Cash zinc, however, fell by £5.5 to £336 a tonne, in spite of an announcement by the UK based smelter, A. M. and S.

Free market platinum lost £6.35 to £295.90 an ounce.

Efforts to avoid rubber pact delay

By OUR COMMODITIES STAFF

OFFICIALS of the United Nations Conference on Trade and Development (UNCTAD) are making last-minute efforts to persuade the U.S. and EEC countries to ratify the international rubber agreement quickly so that it can come into force as planned on October 1.

The agreement needs the ratification of countries accounting for at least 65 per cent of both imports and exports of rubber. At the moment it has been ratified by Malaysia and Indonesia—giving 73.6 per cent on the exporting side; but on the importing side only Japan, China, Czechoslovakia and Australia—representing 22 per cent of imports—have ratified.

If the agreement is not ratified on time it would mean that the International Rubber Council could not start work. But

Europe, that it had decided to revise its European price increase from \$805 to \$845 a tonne. This brings it into line with other leading producers in Canada and Australia, who reacted to the original A. M. and S. rise of \$25 to \$805 by going to \$845 instead.

However, traders were worried by the fact that European smelters have not joined in the rise so far and are reported to be doubtful as to whether the market can stand an increase to \$845.

Lead was boosted by news from the U.S. that St. Joe Lead Company, one of the leading producers, had raised its domestic selling price for corroding grade lead by 3 cents to 45 cents a lb. This suggests that demand is recovering after the heavy falls suffered in the second quarter.

Following the downturn in gold, the London bullion spot quotation for silver was cut by 12.5p to 891.30p a troy ounce at the morning fixing. Values recovered slightly in afternoon trading and the LME cash price closed at 903.5p an ounce, still 40.5p down on the previous day's close.

Free market platinum lost £6.35 to £295.90 an ounce.

The apparent sharp decline in forecast consumption this year reflects exceptionally high feed use of wheat in the USSR in the 1979-80 season when a large degree of substitution of wheat for rice and maize was also seen in developing countries, the report says. Reuter

Record European harvest seen

By TONY WALKER IN PEKING

FARMERS of the EEC will produce a record cereals crop this year, but they may face difficulties in selling part of it, it was predicted yesterday.

The 1980 cereals harvest in the nine EEC nations could total 118.5m tonnes, according to the farmers' union lobby organisation Copa.

This would be nearly 5 per cent more than last year's 113m tonnes and will face the EEC countries with the choice of buying up surplus grain for stocks or selling it at subsidised rates on the world market.

Bad weather earlier this summer at one point appeared to threaten harvest, and may have caused a drop in quality in some crops, a Copa official said.

The London-based International Wheat Council predicts world wheat production should be at least equal to the record 450m tonnes in the crop year which started in July.

This compares with the 1979-1980 output of 425m tonnes and the previous record of 450m in 1978-79.

The IWC said its estimate is tentative, as southern hemisphere crops will not be harvested for several months, although it does include the latest low estimate of the Australian crop.

The apparent sharp decline in forecast consumption this year reflects exceptionally high feed use of wheat in the USSR in the 1979-80 season when a large degree of substitution of wheat for rice and maize was also seen in developing countries, the report says. Reuter

Grain ban alters world trade patterns

CHICAGO — The greatest effect of the U.S. embargo on grain shipments to the Soviet Union has been to change world trade patterns, U.S. Secretary of Agriculture Bob Bergland told the Chicago Council on Foreign Relations.

"The embargo is now largely a political statement," Mr. Bergland said.

"Some people argue that it has had no effect on Soviet supplies. This may be true, but it has prevented them from selling grain to Eastern European countries which they traditionally supplied under dictated conditions. So now we are selling to these countries, and that is to our foreign policy advantage."

China buys more grain

By TONY WALKER IN PEKING

CHINA has been extremely active in world grain markets recently suggesting it expects a shortfall in its own production.

The Chinese may also be buying now in the expectation that buoyant world wheat prices will rise further.

According to U.S. agricultural officials, China has been buying heavily in the American market since June. They estimate Chinese grain purchases from the U.S. this year have topped 6m tonnes, mostly wheat.

These are easily the largest Chinese grain purchases from the U.S. Last year China took only 1.8m tonnes of American wheat.

An expected drop this year in wheat production in Australia and Canada — traditionally China's biggest suppliers, may have influenced Peking to buy heavily in the U.S. market.

China has also recently renewed wheat deals with long-term suppliers like Canada and Argentina. Canada has agreed to supply China with a minimum of 8.4m tonnes of grain over a three-year period ending in July, 1982. Argentina agreed to

supply 1m tonnes of wheat and maize over the next year or so. A third agreement was reached last week with the French for the supply of 0.5m tonnes to 0.7m tonnes of grain each year for three years.

This deal has puzzled agricultural attaches in Peking. French wheat prices are not competitive on world markets. For China to purchase at these prices would require special subsidy arrangements agreed to by the EEC.

Traditional suppliers like Australia and Canada may not be happy if the EEC agreed to such an arrangement on long-term supplies as opposed to spot sales. France has been supplying 0.2m to 0.3m tonnes of grain a year to China.

One attaché described the French agreement as a possible bargaining ploy by the Chinese who may be getting anxious about long-term supplies at reasonable prices.

China has admitted a shortfall of 10 per cent in summer wheat production. This suggests it will have difficulty matching last year's record output.

According to some estimates China's wheat crop may be down by 6 per cent this year. This would partly explain its recent activity in grain markets. China imported more than 10m tonnes of grain last year. Imports this year will easily top that figure.

The value of grain purchases from the U.S. alone this year may approach \$1bn. Unlike other suppliers, American does not negotiate long-term agreements with the Chinese, who have to buy on the open market.

China has imported considerable amounts of grain over the past two years in spite of record output. Big grain imports are part of present policy to increase supplies of basic foodstuffs throughout China.

One agricultural attaché said Chinese purchases in the American market may also be influenced by political considerations. He said it would not have escaped the attention of the Chinese that wheat shipments to the Soviet Union by countries like Australia continue at high levels in spite of the embargo spearheaded by the U.S.

No hormone threat to UK veal sales

By John Cherrington, Agriculture Correspondent

HORMONE growth promoters, which have led to concerns on the Continent refusing to buy veal, are unlikely to affect sales of home-grown veal in the UK. Use of such additives is rigidly controlled by the Medicines Act.

Various growth promoters are used in the form of antibiotic steroids which are fed to most types of intensively kept animals.

The products themselves are licensed for use under the Medicines Act. This lays down not only the materials to be used but the dosage and times of application, so that here can be no possibility of a residual amount in the carcass after slaughter.

The product widely used on the Continent is Stilbestrol, a synthetic hormone which has the effect of encouraging water retention in the tissues and this increases the killing weight. It also prevents the growth of the long bones, thus giving the animals a blocky appearance.

The use of this material is officially banned in European countries but there is a widespread black market which until now has not been suppressed by the authorities. The ban was applied in the UK some years ago when it was suggested that these materials should be used.

Asked if British veal calves were fed on these growth promoters, Mr. Philip Paxman, director of one of the largest companies, Volac, told me that they had been using some of the permitted ones but had now given them up. He said the ban of the sale of public disfigurement, which has been building up in Europe for some time now, but also because in the end their results were just as good as long as the animals were kept in a good environment with adequate nutrition.

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